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# The Archaeology and History of Fort Pelly I 1824 - 1856

by
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# THE ARCHAEOLOGY AND HISTORY
# OF FORT PELLY I
# 1824 - 1856

by
Olga Klimko

Based on a Master of Arts Thesis
for
The Department of Anthropology
and Archaeology
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# ABSTRACT

Fort Pelly 1 was a Hudson's Bay Company post which operated in eastern central Saskatchewan from 1824 to 1856. The site was excavated by the Saskatchewan Museum of Natural History, Department of Natural Resources. G. Watson supervised the field excavations, conducted in 1971, 1972 and 1974. Fifteen features, the palisades, and a large sample of artifacts were found.

The report focuses on the archaeology and history of Fort Pelly 1. Emphasis is on the description and analysis of structural and artifactual data as they reflect the social and cultural aspects of the post's historic occupation. Hypotheses were formulated regarding these aspects and were tested using information from historic sources and structural and artifact analyses.

The historical, structural and artifactual analyses demonstrate Fort Pelly's importance and influence in the fur trade in the 19th century. They also reveal various social activities occurring at the Fort; the centres of these activities; the acquisition of goods from outside suppliers; and the degree of luxury enjoyed at the site.

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# CHAPTER ONE

# INTRODUCTION

The arrival of the fur traders and fur trading companies such as the Hudson's Bay Company (hereafter referred to as HBC), the North West Company (hereafter referred to as NWC), and the XY Company (hereafter referred to as XYC) and their interaction with Indian populations, initiated a variety of new relationships, changes and modes of utilizing natural resources in central Saskatchewan. The posts of these companies provided important centres for cultural interaction and exchange among these various groups. They also functioned as communities with their own range of social and economic activities.

Fort Pelly 1, a HBC establishment, was a major fur trade post operating in central Saskatchewan from 1824 to 1856. The central focus of this report is the archaeology and history of Fort Pelly 1, with emphasis on the description and analysis of structural and artifactual data as they reflect social and economic aspects of the post's activities. Also, this data, in conjunction with historic records, will be used to test certain hypotheses concerning cultural, behavioural and transformational processes which would affect the archaeological data base.

## 1.1 Theoretical Background and Concerns

The development of theory in historic archaeology has been dominated by the debate between history and anthropology/archaeology regarding the placement and purpose of historic archaeology. One group of scholars (Harrington, Fish, Russell) advocated a historicalist position, emphasizing the importance of historic and archival material, while another group (Cotter, Fontana and Griffin) were concerned with more complete cultural reconstruction and less with preservation and restoration as primary goals (Schuyler 1978:1). This debate is not restricted to the beginnings of historic archaeology but continues to be discussed and has become more complex in recent years.

One crucial problem that existed and continues to exist between the two is the treatment of material objects and archival material as separate entities beyond a methodological level to synthetic and interpretative levels. Schuyler (1978:28) pointed out that historians paid little attention to artifactual data and that what was needed was the evolution of a discipline within archaeology using the documentary record more extensively, and at the same time continuing and intensifying the utilization of material data. To try and comply with the above ideal South

(1977:216) and Leone (1977:xviii) view the written records as another set of existing data that can be added to the archaeological data in order to test and corroborate hypotheses.

The above problem is related to the fact that two disciplines, each with their own theories, are involved. While the archaeologist may complain that the historians are particularistic and idiographic in their approach, they are not trained as historians. Writing history or extrapolating historical generalizations from archival or other written records requires distinct processes of inference, just as cultural reconstruction from artifactual material does. The historian, justly or not, therefore, might complain that the archaeologist does not know much about purely historical inference.

To complicate matters further, criticisms from within the discipline of anthropology itself were levied at the archaeologist. Schuyler (1978) and Binford (1968) complained that while most archaeologists had been trained as anthropologists, they had not, until recently, been anthropological in their research, especially in searching for underlying patterns, processes and laws to explain cultural reality. This set the trend for the "new" archaeology of the 60s.

The "new" archaeology claimed to be scientific and nomothetic in its perspective with the aim of formulating laws or regularities that would explain socio-cultural processes and associated human behaviour (South 1977:17). Two approaches, the processual and the problem-oriented, belong to this "new" archaeology. The processual approach attemps to develop universalistic nomothetic laws that can be applied cross-culturally and over time. However, due to the complexity and variation of human behaviour these "universal nomothetic laws" are limited to a "series of low-level generalizations" (Flannery 1973:51). The problem-oriented approach, on the other hand, concentrates on examining various specific problems related to cultural behaviour and then recombining these in a nomothetic model (Flannery 1967:120).

This "new" trend has been accepted and applied by many prehistoric archaeologists, but it has had a more difficult time integrating itself into historic archaeology. One reason is that a number of researchers, Noel-Hume (1978a), Walker (1978) and Dollar (1978), advocate that historic archaeology belongs with history and they accept a particularistic paradigm which is idiographic and inductive. Others, such as Cleland and Fitting (1978), Binford (1962), South (1977) and Schuyler (1978), believe that historic archaeology is not mainly a tool for reconstructing structures and history. They feel that by approaching historic sites with an anthropological perspective and using the "scientific method" of investigation, data would be generated, providing significant statements about technology, style or function in a social, political or ideological context. The "scientific method" alluded to, refers to the "hypothetico-deductive method" which involves the formulation of hypotheses and subsequent testing in order to distinguish patterns of cultural behaviour (South 1977:15). The formulation of these hypotheses is based on a series of assumptions or propositions derived from prior research, historical documents, ethnographic descriptions, etc. This process allows the archaeologist to make statements concerning cultural behaviour based explicitly upon the data, and provides a mechanism for comparative studies. This method has been employed with great enthusiasm by many archaeologists. Schiffer (1977), however, cautions that a number of cultural and non-cultural processes exist which could affect and distort the archaeological data base. Also, criticisms have been levied at this scientific method, questioning its validity regarding explanation of cultural process (Salmon 1975, 1976).

In historic archaeology, South (1977) has been in the forefront of formulating and testing hypotheses using the hypothetico-deductive method, in order to demonstrate the potential in historic archaeology for understanding cultural processes. In this respect, historic archaeology has a number of advantages over prehistoric archaeology. First, it has better control of its data base, and secondly, information is available regarding culturally significant factors. Therefore, historic archaeology provides opportunities for the formulation and testing of hypotheses that could be applied to the prehistoric record.

The main theoretical approach to be employed in this report is the problem-oriented one, using the hypothetico-deductive method. This method allows for the testing of hypotheses, of confirming or disconfirming them. It does not "establish conclusively their truth or falsehood" (Salmon 1975:462). Also the hypothetico-deductive method neither guarantees the establishment of any laws nor confirms them. In this report the focus is on the testing of hypotheses and not the establishment of laws. The hypotheses will be formulated on the basis of historic sources, previous research, imagination, analogy, etc., to provide insight into the social and cultural aspects of the site and the effects of certain cultural, behavioural and formational processes on the archaeological data base.

## 1.2 Research Problems and Hypotheses

The main focus of this report is based on three general research concerns: the relationship and interactions of Fort Pelly 1 within its social and economic environment, especially with the Red River Metis settlement, the Indians, and the American trading companies; the social and cultural patterns at the post; and the presentation of the structural and artifactual data for comparative purposes. These provide a base from which more specific hypotheses and questions regarding group interaction, social and economic activities, technology and interpretations of the archaeological data base may be formulated.

The following hypotheses, which will be tested by the archaeological data recovered, are derived from archival sources, previous archaeological data and my own inferences:

Hypothesis 1:

That Fort Pelly 1 had been, as described by George Simpson in 1832, greatly "embellished" by the various Chief Factors and Traders residing there over the years (HBCA, PAM, D. 4/99, fo. 47d).

Proposition a. Reference pertaining to the expansion of the post and building of various structures would be expected in the post journals.

Proposition b. Structural remains indicating expansion of the post, such as the removal and relocation of palisades and the placement of buildings within new areas would be expected.

Hypothesis 2:

That the "principal part" of the post was destroyed by fire, as is reported to have happened in 1843 (HBCA, PAM, A. 12/2, fo. 165).

Proposition a. Evidence of burning should be present in a number of structural features.

Proposition b. A number of artifacts should bear evidence of being burnt.

Hypothesis 3:

In conjunction with the expansion of the post, an increase in the number of personnel and of social classes with different statuses would be expected. If social status differences of the post's personnel existed, these should be reflected in the artifactual material.

Proposition a. Fine china, such as bone china and porcelain, along with certain expensive china patterns, would be more numerous in areas, such as the factor's house, where the occupants were of higher social status.

Proposition b. The shapes and functions of the vessels would be greater and more varied in areas of higher social status.

Proposition c. Type, number and quality of glass remains, such as wine bottles and glasses, would more likely be found in areas of higher status individuals.

Hypothesis 4:

If an increase of personnel occurred at the post, preferences for specific goods and overseas suppliers may have existed. If preferences did exist, then larger numbers and types of those goods preferred should be found in comparison to these same items at other posts.

Proposition a. Preferences may appear or be noted in the requisition orders provided in the post's account books.

Proposition b. Certain types of ceramics and patterns would appear in large quantities.

Hypothesis 5:

Shortages of certain materials or goods may have been experienced at the post, necessitating the production of items at the post or local acquisition.

Proposition a. Certain items such as nails, pipes and tools could be produced on the site.

Proposition b. Certain goods may have been purchased or traded by independent traders in the area, or acquired from the Red River Settlement or the United States.

Hypothesis 6:

Due to the close proximity of Fort Pelly 1 to the United States and the Red River Settlement, a number of American goods would be expected.

Proposition a. Maker's marks on guns, etc., of firms participating in the American fur trade may appear.

Proposition b. American fur trade items may be present at the post, representing items lost or discarded by the Indians who frequented both Fort Pelly 1 and the American establishments.

Hypothesis 7:

Classes of artifacts and their distributions may be generally accepted as indicating the function of a structure and the activities occurring there.

Proposition a. Large amounts of metal scrap and various metal items along with blacksmithing hardware would be expected in the area of the blacksmith shop and forge.

Proposition b. Large numbers of items associated with food preparation and consumption would be expected in the kitchen.

Proposition c. An abundance of trade items would indicate the presence of the trading store or warehouse.

Proposition d. A concentration of sewing items, snow shoe netting needles, pipes, etc., would indicate areas where activities associated with these items occurred.

Hypothesis 8:

Praeger (1980) has demonstrated that since the main function of trading posts was to exchange goods for furs or provisions, trade goods, therefore, comprise only a small percentage of the total archaeological assemblage, although they were imported in large numbers. Since Fort Pelly 1 was a major trading centre for the Swan River district, serving a number of Indians, similar discrepancies between the accounts and the artifact assemblage would be expected here.

Proposition a. Trade goods, such as axes, beads, buttons, and guns, would be found in small numbers as compared to the numbers requisitioned and received.

Proposition b. A larger number of items not directly involved in trade would be expected.

Hypothesis 9:

Since Fort Pelly 1 was abandoned in 1856 and moved to a new location, certain cultural formation processes dealing with abandonment (Schiffer 1977) should be evident.

Proposition a. If abandonment was anticipated, people may have left refuse in areas, such as house interiors, which would normally be kept free of debris.

Proposition b. If the available means of transport were good and the distance to the new area was short, the number and condition of artifacts left behind would be affected.

In order to test these hypotheses, my main analytical emphasis will include: 1) archival research to outline and define the post's history, its relationships with and impact on the surrounding environment, and its role and importance within the HBC as a whole; 2) a structural analysis to provide a general plan of the post and its construction phases and information regarding construction techniques and practices; and 3) artifact analysis and comparison to provide insight and information regarding social activities, cultural behaviour and transformational processes occurring at the site.

## 1.3 Methodology

### 1.3.1 Site Background and Excavations

Excavations of the site of Fort Pelly 1 were conducted by the Saskatchewan Museum of Natural History for the main purpose of reconstructing the post's structural features. Archival research had revealed that no plans of the post for the 1824 to 1856 period had survived (letter from archivist J. Craig to G. Watson, 1971). G. Watson, of the Museum, was in charge of the excavations, which were conducted by professionals, students and local people in the summer seasons of 1971, 1972 and 1974, and the site was surveyed by the Survey's Branch, Department of Natural Resources. An area of over 186.4 square meters was excavated, and more than 15,000 artifacts were recovered. The excavations had been preceded by a survey conducted by Hugh MacKie for the Historic Sites Branch, Department of Natural Resources, in 1968. Professor A.S. Morton, of the University of Saskatchewan, had previously visited and recorded the site in 1938 (Watson 1971:11). I did not participate in the excavations of the site, but I have visited it several times.

A grid, comprised of ten foot squares, was established over the entire Hudson's Bay Block. A line running east-west and encompassing the historic cairn marker on the site was used as a centre line (hereafter ℄) and roughly divided the site in half, with the squares designated right (R) or left (L) with respect to this line, such as 40R03. The southeast corner was used to designate the square. Excavation procedures included block excavation and trenches to locate features. Visible features on the site consisted of a number of shallow depressions, indicating possible cellars, and mounds.

Grass whips and fire were used to clear surface growth, and spades were employed to remove the overburden and top soil to reach the foundations and remains. At this point, trowels and brushes were used to define and expose features. All excavated matrices were screened using a 6.24 mm mesh.

### 1.3.2 Analytical Methodology

Both formal and functional analyses were conducted for all the artifact classes. Attributes were chosen on the basis of appropriateness for the questions being asked. For example, the paste composition of earthenware, porcelain and bone china, were not described in detail, whereas decorative techniques, maker's marks, shape, size and function of the vessel were. Functional and cultural terms were used where possible. The morphological and quantitative data was presented in table form and descriptions of function and use were provided where possible.

Artifacts were first grouped into functional categories, and then into classes (See Chapter 5 for detailed breakdown). The classes were subsequently broken down into types and formal attributes were recorded. Cultural interpretations, such as pattern names, were employed where possible. The classification system used is basically similar to South's (1977:2) type-ware-class groups. Due to the large quantities of artifacts present in certain classes, such as ceramics, pipes, glass, etc., the formal attributes were recorded on computer sheets, along with the locational data to facilitate the retrieval of information pertinent to the hypothesis being tested. The SPSS package was used.

## CHAPTER TWO

# SITE LOCATION AND GEOGRAPHIC DESCRIPTION

### 2.1 Site Location

The site of Fort Pelly 1 is a provincial protected area situated in Fractional Section 25 Township 32 Range 33 West 1, approximately 15 km southwest of the present village of Pelly, Saskatchewan (Fig. 1). The block (Figs. 2, 3) covers a rectangle containing .98 hectares, its width measuring 61.5 m and its lengths 163.8 m and 163.2 m (Klaus 1968:7). The original north line of the survey bisected the actual site and because of the presence of additional features to the north arrangements were made to relinguish 30.7 m along the south in exchange for 30.7 m in the north (NE¼ 25-32-33 W 1), in order to include the entire site. This did not include the buildings erected outside of the old stockade (Klaus 1968:7).

The site is located on low land, bordered by fields on the north and south, a bluff of willows to the west and the road allowance to the east (MacKie 1968:1). The site is fenced and well covered by natural short grass.

Fort Pelly 1 is situated on the north side of the Assiniboine River at a place referred to as the "Elbow" or "Indian Elbow" (Richards & Fung 1969:4). The name is derived from the particular shape of the river itself. At present, in the immediate area of the post, the river flows due north and then makes a sharp bend and continues east for .8 km. At this point it turns southeast in a series of bends and loops (Klaus 1968:1). The area around the sharp bend is referred to as the "Elbow".

Traditional accounts state that some time ago the river changed its course in this vicinity, cutting off a segment of an originally more acute angle which extended approximately .8 km north to the site of Fort Pelly 1. A series of alluvial terraces indicating the presence of old river beds extend from the post to the present river. When the river rises in the spring, these terraces become flooded.

Navigation along the river was difficult, if not impossible, at times, due to its shallowness and the large number of shoals. However, during the spring the river rose sufficiently to allow voyaging for a short time. In 1825 the river rose high enough to flood the post and carry off half of the establishment (HBCA, PAM, D. 4/119, fo. 58).

The trade route employed by the HBC for transporting articles to and from Fort Pelly 1 consisted of the following waterway system: Lake Winnipeg, Dauphin River and Lakes Manitoba and Winnipegosis, down the

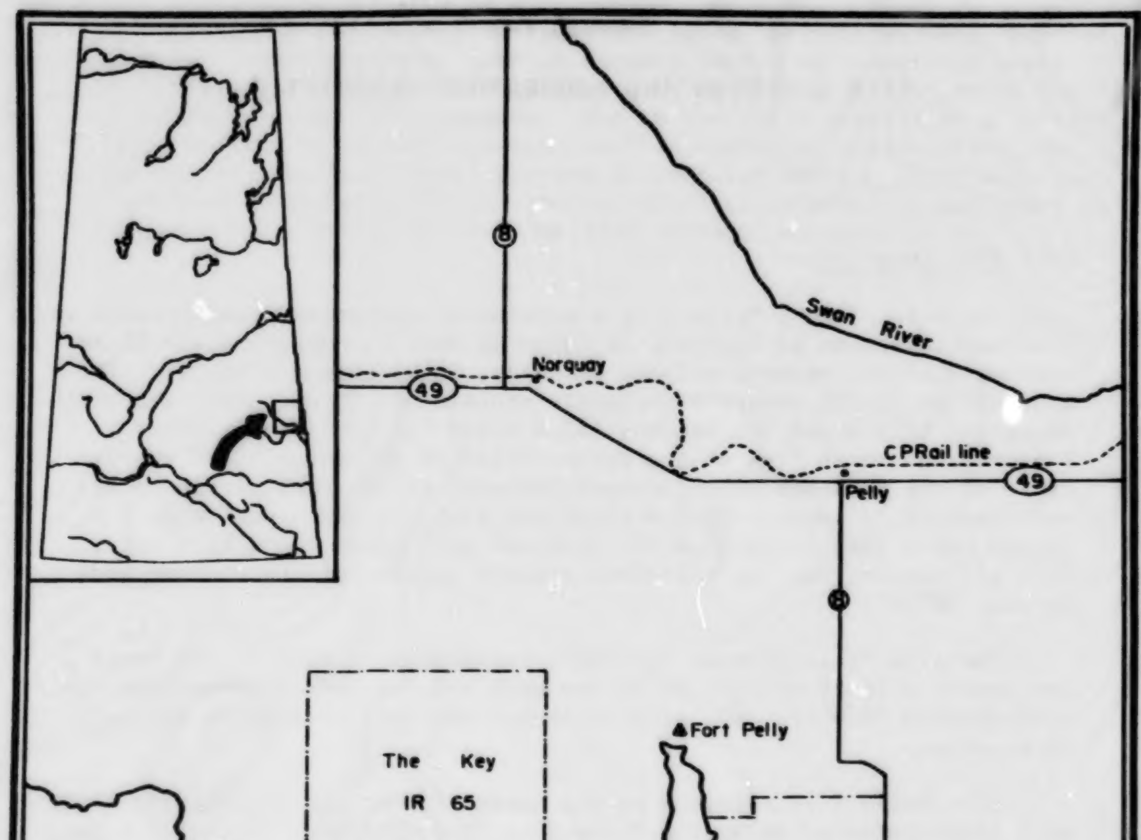

Swan River
Norquay
49
8
CPRail line
Pelly
The Key
IR 65
Fort Pelly
Assiniboine River
Keeseekoose
IR 66
St. Philips
N
Cote IR 64
Mikado
CNRail line
5
Veregin
0
5km
Kamsack

Figure 1. Locational map of Fort Pelly 1.

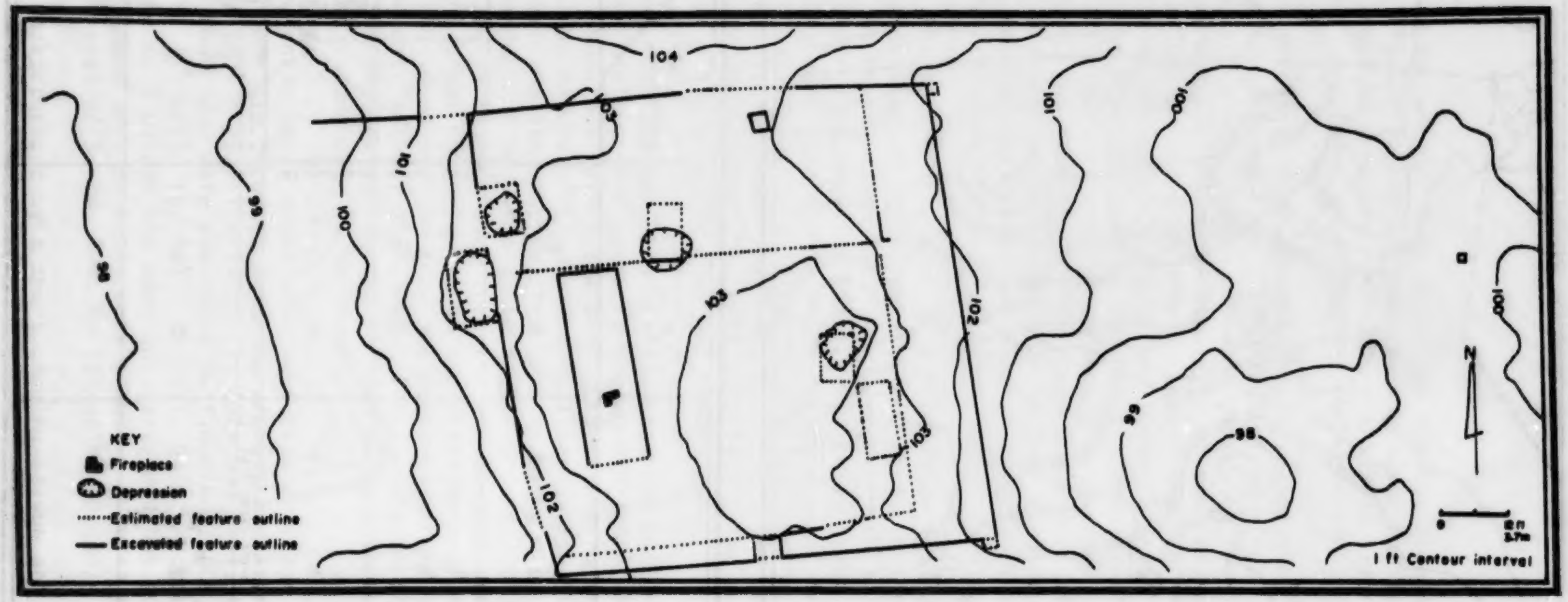

104
103
102
101
100
99
98
103
102
101
100
99
98
100
N
0
12 ft
3.7m
1 ft Contour interval
KEY
Fireplace
Depression
Estimated feature outline
Excavated feature outline

Figure 2. Block 17: contours and post location.

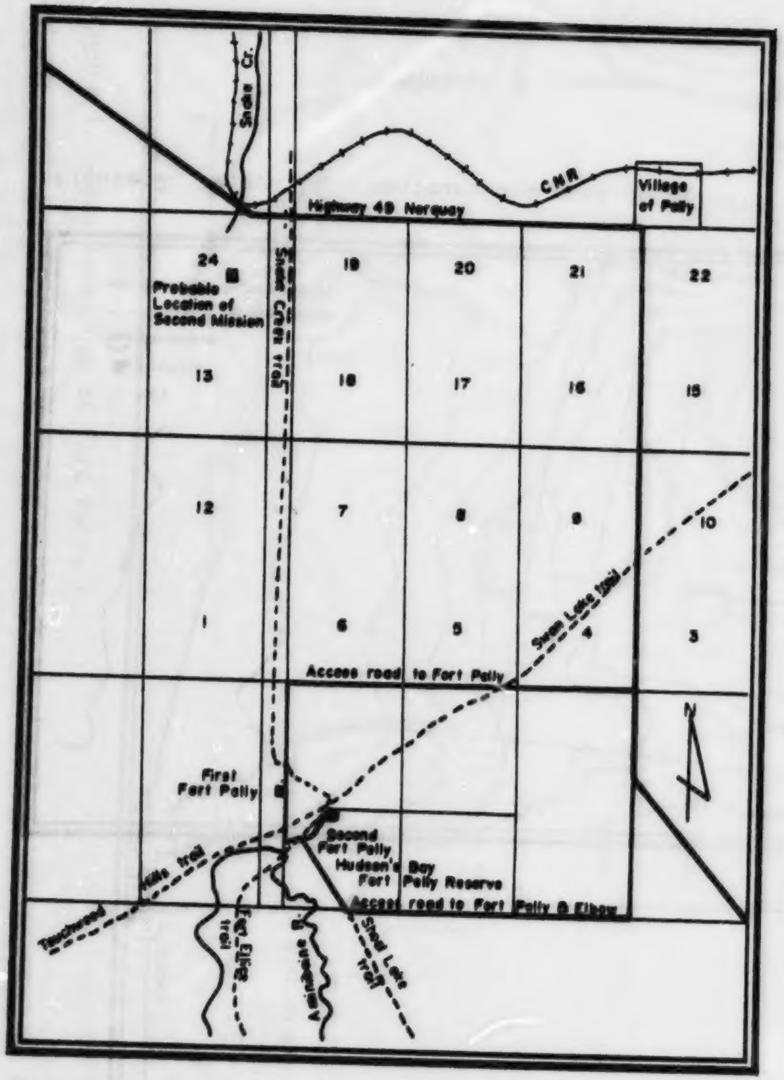
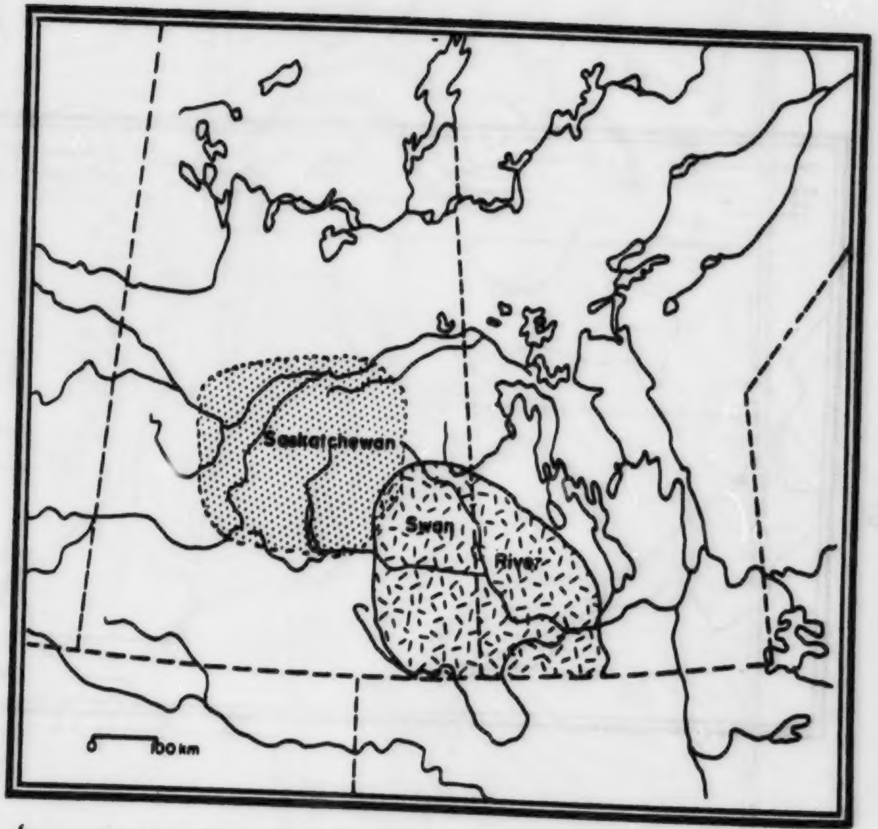

Snake Cr.
CNR
Village of Pelly
Highway 49 Norquay
Snake Creek trail
24
Probable Location of Second Mission
19
20
21
22
13
18
17
16
15
12
7
8
9
10
1
6
5
4
3
Swan Lake trail
Access road to Fort Pelly
N
First Fort Pelly
Second Fort Pelly
Hudson's Bay Fort Pelly Reserve
Access road to Fort Pelly & Elbow
Hills trail
Touchwood
Fort Ellice trail
Assiniboine R.
Swan Lake trail

Figure 3. Detailed View of Fort Pelly 1 area.


Saskatchewan
Swan
River
0
100km

(map adapted from Ray (1974) and 1859 description of Chief Factor Wm. J. Christie)

Figure 4. Swan River Trading District.

Swan River and by a portage of 16 km across to the Assiniboine (Morton 1942:102). The difficulties and inconveniences caused by this route, especially the portage between the Assiniboine and Swan Rivers are expressed in Cummings' complaint about the entire operation in 1844:

> ...Got everything ready preparatory to taking the Batteaux to the Swan River, a portage of 10 miles and not very good for such unwieldy cargo, at the same time showing the utter absurdity of the present system by taking the wrong road. Surely the Red River, it is evident, should be the route for exporting the prairie rations, and not the Swan River. It is full time that the system should be changed altogether, and that the business and the export of prairie produce should be conveyed to Lake Winnipegosis by the natural channel, R.R.
> (Cummings' Journal, April 10, 1844).

Technically, the soil of the area is a fine sandy loam which falls into the Pelly Association of the Degraded Black Soils (Mitchell 1977: 143). This Pelly Association consists of medium textured soils developed on resorted boulder clay deposits with the soil landscape characterized by smooth topography, few stones and a heavy cover of tall aspen, black poplar and occasional spruce (Mitchell 1977:143). The soils are found on smooth undulating topography, but local flats and depression areas are frequently encountered (Mitchell 1977:143). The post was built in a low flat plain on sandy soil and swampy land.

Allan McDonell mentions upon his arrival that the post was to be built on "the lower plain ground close to the woods" (HBCA, PAM, B. 159/a/8, fo. 9d). Numerous references are found attesting to the swamp in the area and sandy nature of the soil. Palliser (Spry 1968:164) in 1857, commented that the old post existed in a swamp, giving this as the reason for its abandonment and removal to higher ground. Chief Factor William J. Christie, in 1859, states that the arable land around the post "is not of any great extent owing to the prevalance of sandy soil and swampy land," but does mention that the pastures around the post were excellent for cattle (Spry 1968:526). The lowness of the spot may also account for the post being flooded in 1825 along with continual threats of flooding throughout its existence.

These low or nearly level areas also have slow drainage and in wet seasons may be temporarily flooded, delaying seeding and increasing the hazard of frost (Mitchell 1977:144-145). In 1825 and 1831, the gardens situated close to the river were destroyed by flooding (HBCA, PAM, D.4/119, fo. 58; B. 159/a/13, fo. 4d). In 1831, Chief Factor John Clarke complained that the soil around the post was sandy and not good for growing anything and, therefore, potatoes were grown in an area about 4.8 km away (HBCA, PAM, B. 159/a/13, fo. 10d; B. 159/a/14, fo. 2d).

The area is characterized by a short growing season and early frost, which make coarse grains a safer crop than wheat (Mitchell 1977:145). The post experienced this problem in 1833 when their wheat failed to grow due to the "backwardness of the season" (HBCA, PAM, B. 159/a/14, fo. 14). Crops grown at the post were restricted to barley, potatoes, cabbages and turnips.

## 2.2 District View

Fort Pelly I was established as the headquarters of the Swan River District (Fig. 4) which covered a large tract of land in present day Saskatchewan and Manitoba. In 1825, Chief Trader Allan McDonell, outlined its limits as follows:

> It is divided on the north from the Cumberland House District by an imaginary line running eastward through the Pasqua Hills then along the south shore of the Cedar Lake, then due east to Lake Wenipic it is bounded on the east by Lake Wenipic and the eastern extremity of Lake Manitobah, on the south by River Qu'Appelle and its Lakes, on the westerly an imaginary line which divides it from the Saskatchewan District.
> (HBCA, PAM, B. 159/e/2, fo. 1).

William J. Christie, Chief Factor in 1859, presents a more detailed description of its limits:

> The Swan River districts extend from the Manitobah post on the south, and of Manitobah lake, to within three days of Fort Carlton on the north branch of the Saskatchewan river. It embraces the country as far south as the boundary line from longitude 99°W to 106°W. To the west it bounds with the Saskatchewan district, and on the north, with the Cumberland district.
> (Spry 1968:526).

Fort Pelly was strategically located and connected by trails to a number of posts in the immediate and surrounding districts. These are indicated on Palliser's 1865 map (Fig. 5).

## 2.3 Geographic Setting

The post is located in the Parkland-Southern Boreal Forest interface which has a continental-sub-arctic climate (Richards & Fung 1969:4). This area was favoured by the HBC for the establishment of their provision posts, for example, Fort Pitt, Fort Pelly and Fort Edmonton. The main reason was the abundance and the great variety of fauna and flora

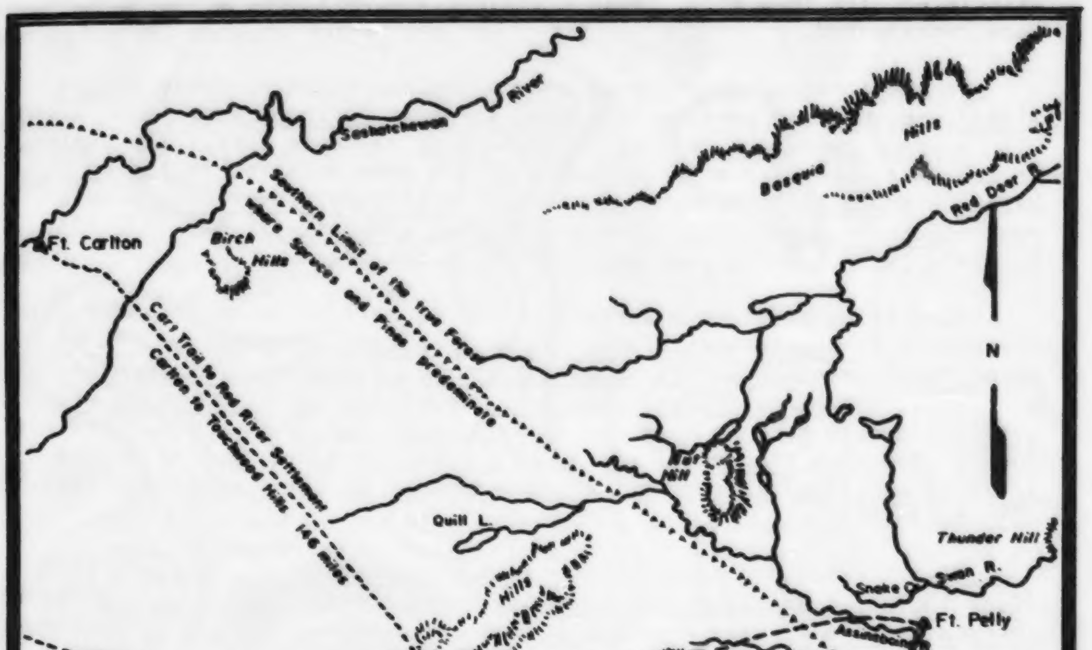

Saskatchewan River
Basquia Hills
Red Deer R.
Ft. Carlton
Birch Hills
Southern Limit of the true Forest where Spruces and Pines predominate
Cart Trail to Red River Settlement
Carlton to Touchwood Hills 146 miles
N
Quill L.
Thunder Hill
Snake Cr.
Swan R.
Ft. Pelly
Assiniboine R.
White Sand R.
Touchwood Hills P. to Moose Woods 130 miles
Touchwood Hills Post
Touchwood Hills
Little Touchwood Hills
Pine Cr.
Long or Last Mountain Lake
Ft. Ellice to Touchwood Hills 169 mi.
Hill
Pheasant Hill
The Fishing Lakes
Qu'Appelle Mission
Qu'Appelle or Calling R.
Ft. Ellice
Trail very bad
Qu'Appelle Trading Post
0
60 mi.

Figure 5. Palliser's 1865 map, showing location of trails and pines (Palliser 1865).

associated with this area. Both grassland and parkland/forest species were represented.

In the forested areas large game animals, including moose (Alces alces) and woodland caribou (Rangifer tarandus caribou) were found along with a great number of small game, providing valuable furs. The plains, in contrast, provided a large number of big game animals, including bison (Bison bison), pronghorn antelope (Antilocapra americana), mule deer (Odocoileus hemionus), and elk (Cervus canadensis) (Ray 1972:105; Banfield 1974). Small game was limited in the plains.

Both areas provided a variety of edible berries which included wild strawberry (Fragaria virginiana, Fragaria vesca), chokecherry (Prunus virginiana), pincherry (Prunus pensylvanica), saskatoon (Amelanchier alnifolia), dewberry (Rubus pubescens), bearberry (Arctostaphylos uva-ursi), and nuts such as hazelnut (Corylus cornuta) (Budd 1969). Prairie turnip (Psoralea esculenta) was found in the grasslands and wild rice (Zizania aquatica) in the southeastern section of the forest (Ray 1972: 105; Budd 1969).

Fish, including whitefish (Coregonus clupeaformis), northern pike (Esox lucius), carp (Cyprinus carpio), perch (Perca flavescens), goldeye (Hiodon alosoides) were abundant in the Assiniboine, Red and Saskatchewan Rivers (HBCA, PAM, B. 159/e/3, fo. 2, Fedoruk 1969; Scott & Crossman 1973).

Ducks including mallards (Anas platyrhynchos), pintail (Anas acuta), and ring-neck (Aythya collaris) were found in the region. Geese were also present and included the Canada goose (Branta canadensis) and white-fronted goose (Anser albifrons frontalis) (Bellrose 1976).

The people at the post utilized this varied subsistence base and numerous references to this are found throughout the various post journals. In November of 1832, the post depended upon moose and red deer and dried provisions (HBCA, PAM, B. 159/a/14, fo. 7). Fisheries were established at a number of places, Porcupine Hills, Duck Bay, Shoal River, and produced carp and whitefish. A total of up to a thousand whitefish was reported for February of 1833 at Duck Bay and 400 from the Porcupine Hills in December of 1835 (HBCA, PAM, B. 159/a/14, fo. 10d, Todd Dec. 10, 1835). In the spring of 1833, one man was sent to hunt ducks and geese for the post (HBCA, PAM, B. 159/a/14, fo. 14d).

Bison, especially dried meat, was obtained from the natives. In February of 1829, the "long looked for men" arrived from the plains, "loaded with Half dried meat" (HBCA, PAM, B. 159/a/10, fo. 16d). In December of the same year the buffalo were reported as being "close this winter" (HBCA, PAM, B. 159/a/11, fo. 19). On February 10, 1833, the men who started for the plains returned shortly with two Crees "who they met coming for People to fetch provisions from the Plains" (Tood Feb. 10, 1833). However, supplies were not always abundant or easily acquired. The Indians complained in the winter of 1832, that the buffalo were scarce owing to the mildness of the weather which prevented them from approaching the animals (HBCA, PAM, B. 159/a/14, fos. 3, 8).

In addition to the varied fauna and flora the area also provided an abundant supply of wood which was necessary for the construction of the posts and other articles (i.e., boats, sleds, etc.) and for the heating of the buildings.

These factors outweighed any others, such as arable land, in the decision of Chief Trader Allan McDonell's choice of the site of Fort Pelly 1, as noted in his journal entry:

> ...pitched a very short distance back to the lower plain ground close to the woods, where we pitched upon a small eminence for our house. The situation is in a fine valley environed by rising grounds on the E. and W; on the N thick woods and on the S. a continuation of the valley, through which winds the Red River and on the NE a high a fine plain, running towards the third Crossing Place of the Swan River on whose margin the Snede Creek. It is situated circa six minutes from the Red River, has abundance of woods for building boats of poplar and pine, but hard wood such as oak, birch, etc. for sledges etc. none is to be found in the neighbourhood...
> (HBCA, PAM, B. 159/a/8, fo. 9d, 10).

To thc north of the post, near the Thickwood Hills, the area abounded with a variety of trees used by the post. McDonell lists woods of maple, elm, ash, fir, birch and oak, but the most common in the area appear to be aspen, black poplar, spruce and pine (HBCA, PAM, B. 159/e/2, fo. 1, Mitchell 1977:143; Spry 1968:526).

The location of Fort Pelly 1 had both advantages and disadvantages. Its advantages included: (1) a parkland location with an abundant and great variety of fauna and flora; (2) accessibility to posts in the immediate and surrounding districts via trails; and (3) an abundance of wood for building and heating. Disadvantages were more numerous and consisted of: (1) navigational difficulties due to the shallowness of the Assiniboine River and large number of shoals; (2) seasonal flooding, which occasionally ruined the gardens and threatened the post; (3) the difficulties and inconveniences of the route employed, which included a 16 km portage, to transport goods; and (4) the low, flat and swampy nature of the soil which combined with a short growing season and early frost, restricted the kinds of crops grown in the area.

## CHAPTER THREE

# HISTORICAL BACKGROUND OF FORT PELLY 1 AND AREA: 1791-1856

Fort Pelly 1 was established by the Hudson's Bay Company during 1824 in the Assiniboine-Swan River District following a period of intense rivalry among the three major trading concerns, the Hudson's Bay Company, the North West Company, and the X.Y. Company. The merger of the HBC and NWC in 1821 and the establishment of the Red River Settlement, also affected the establishment and existence of Fort Pelly 1.

### 3.1 Early Posts in the Upper Assiniboine River District During the Time of Rivalry

Between 1791 when the first known post, Fort de la Riviere Tremblante (NWC), was established in the Upper Assiniboine River District and 1821 when the last two posts, Fort Hibernia (HBC) and Fort Alexandria (NWC), were closed after the coalition, the district witnessed intense rivalry between the HBC, NWC, XYC, and Independents. The posts were established for the express purpose of collecting furs and not provisions (Rich 1960:183; Morton 1973:432; Innis 1970:234). No less than sixteen posts are known to have been established between 1791 and 1821 (Table 1) with five posts competing simultaneously at times within an area of 24 km. This situation existed in the trading season of 1795-96, and the resultant competition, relations and problems noted in succeeding years are indicative of fur trade rivalry during this period.

In 1795, the HBC established two posts in the area, Carlton House, built by Charles Prince Isham and Albany House, built by John Sutherland (Fig. 6). The NWC in 1795, established Fort Alexandria approximately 137 m from Carlton House (Morton 1942:107) and a post alongside Peter Grant's post (Independent). Peter Grant, along with his brother David, left the employ of the NWC and formed their own company in 1790 (Morton 1973:433).

Although not in the immediate Upper Assiniboine River are the NWC also built Belleau's Post in 1795, approximately 9.5 km northeast of Albany House (Morton 1942:106). This post existed outside the valley of the Assiniboine River, but it served the NWC strategy and practice of multiplying their posts when faced with competition. They would spread themselves out in order to strain the resources of their opponents and finally drive them out (Morton 1942:109). They succeeded in ruining Peter Grant's operation. Isham of Carlton House recorded that the NWC built alongside Grant and that:

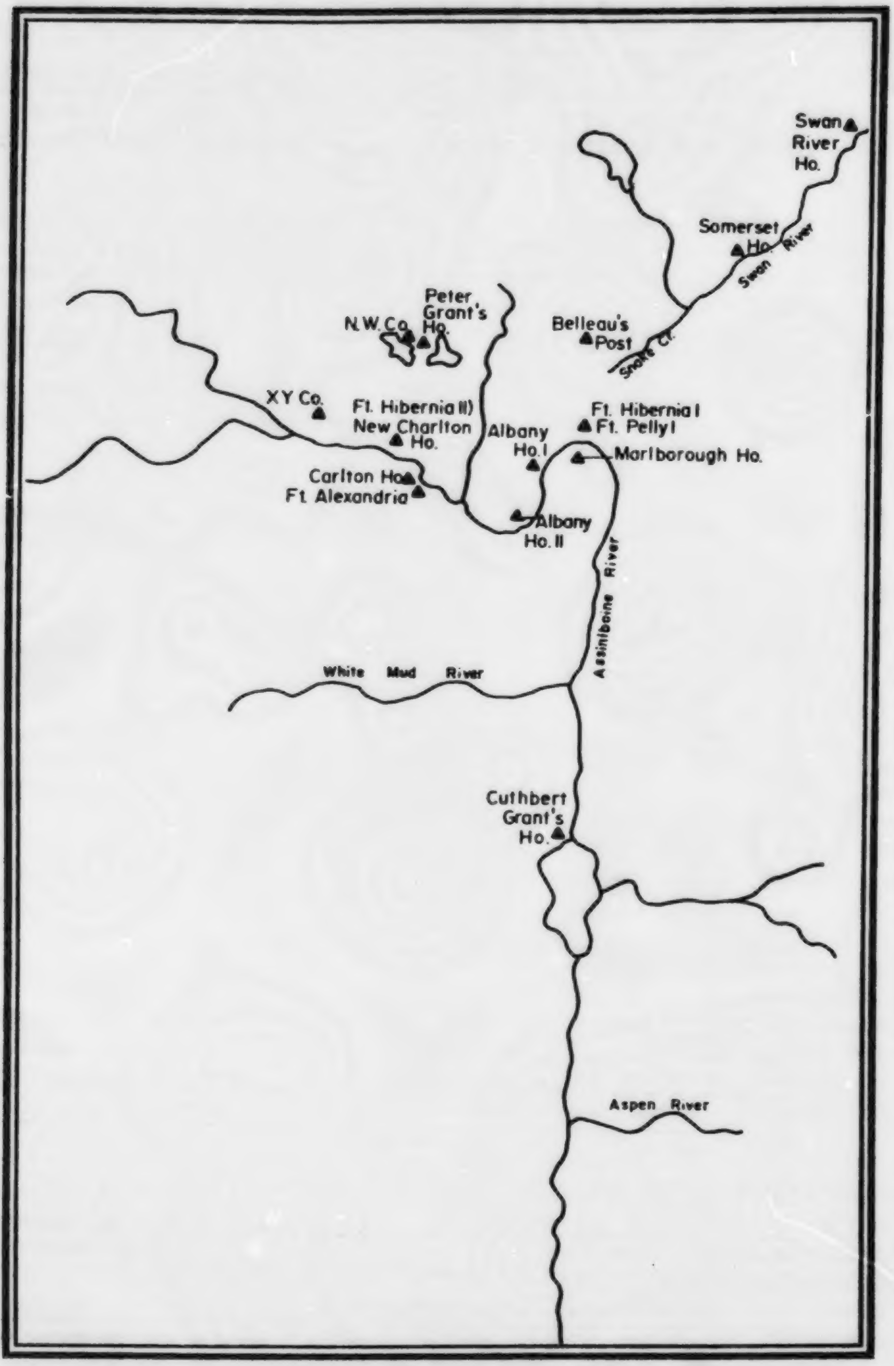
TABLE 1

Early Posts in the Upper Assiniboine Area 1791 - 1821

| Year | Hudson's Bay Company (HBC) | North West Company (NWC) | XY Company (XYC) | Independent |
|---|---|---|---|---|
| 1791-92 | | Fort de la Riviere Tremblante (Cuthbert Grant's House) E. | | |
| 1792-93 | | Fort de la Riviere Tremblante O. | | |
| 1793-94 | | Fort de la Riviere Tremblante O. | | |
| | Marlborough Ho. E.......... | NWC beside E. | | |
| 1794-95 | | Fort de la Riviere Tremblante O. | | |
| | Marlborough Ho. C.......... | NW beside C. | | |
| 1795-96 | | Fort de la Riviere Tremblante O. | | |
| | Albany's Ho. 1 E........... | Belleau's Post E. | | |
| | Carlton Ho. 1 E............ | Fort Alexandria 1 E. | | |
| | | NWC beside Peter Grant E.................. | | Peter Grant's Ho. E. |
| 1796-97 | | Fort de la Riviere Tremblante O. | | |
| | Albany Ho. 1 O............ | Belleau's Post O. | | |
| | Carlton Ho. 1 O ........... | Fort Alexandria 1 O. | | |
| | | NWC beside Peter Grant C.................. | | Peter Grant's Ho. C. |
| 1797-98 | | Fort de la Riviere Tremblante O. | | |
| | Albany Ho. 1 O............ | Belleau's Post C. | | |
| | ............ | NW beside Albany Ho. E. | | |
| | Carlton Ho. 1 O............ | Fort Alexandria 1 O. | | |
| 1798-99 | | Fort de la Riviere Tremblante C. | | |
| | Albany Ho. 1 D............ | NW beside Albany 1 O. | | |
| | Carlton Ho. 1 C............ | Fort Alexandria 1 O. | | |
| | New Charlton Ho. E. | | | |
| 1799-1800 | Albany Ho. 2 E............. | NWC beside Albany Ho. 1 O. | | |
| | New Charlton Ho. O.......................... | Fort Alexandria 1 O. | | |
| 1800-01 | Albany Ho. 2 O. | NWC beside Albany Ho. 1 C (?) | | |
| | New Charlton Ho. C. | Fort Alexandria 1 O. | | |
| 1801-02 | Albany Ho. 2 O............. | Fort Alexandria 1 O. | | |
| 1802-03 | Albany Ho. 2 O............. | Fort Alexandria 1 O. | | |
| 1803-04 | Albany Ho. 2 O............. | Fort Alexandria 1 O......... | XY Co. E. | |
| 1804-05 | Albany Ho. 2 O............. | Fort Alexandria 1 O......... | XY Co. O. | |
| 1805-06 | Albany Ho. 2 C............. | Fort Alexandria 1 C......... | XY Co. C. | |
| | Fort Hibernia 1 E. (?) | | | |
| 1806-07 | Fort Hibernia 1 O. | | | |
| 1807-08 | Fort Hibernia 1 C. | | | |
| | Fort Hibernia 2 E.......... | Fort Alexandria 2 E. | | |

Fort Hibernia 2 and Fort Alexandria 2 continue in operation until the NWC and HBC coalition in 1821, at which time they are both closed.

KEY: E.= Established; O.= Operating; C.= Closed; D.= Destroyed; ... = in opposition to; (?) = exact date not known; Ho. = House


Swan River Ho.
Somerset Ho.
Swan River
Peter Grant's Ho.
N.W.Co.
Belleau's Post
Snake Cr.
XY Co.
Ft. Hibernia II)
New Charlton Ho.
Albany Ho. I
Ft. Hibernia I
Ft. Pelly I
Marlborough Ho.
Carlton Ho.
Ft. Alexandria
Albany Ho. II
Assiniboine River
White Mud River
Cuthbert Grant's Ho.
Aspen River

(map adapted from Arrowsmith's map 1802, 1811, and map in Johnson 1967)

Figure 6. Early Posts in Upper Assiniboine River.

> ...they [Grant] are all nearly ruined for the old NWest Company uses every method to put a stop to their further proceeding in giving an immense quantity of Goods to the Natives for very little returns...
> (HBCA, PAM, B. 28/a/1, fo. 4d).

Many times during that winter Grant's men faced starvation as the NWC posts in the area intercepted the Indians and cut off provisions from Grant and also Albany House (HBCA, PAM, B. 159/a/2, fo. 9d).

Although not successful in driving out the HBC, the NWC presence was keenly felt by the HBC men and affected the trade. John Sutherland at Albany House complained that the NWC had built Belleau's House five or six miles to the north and Fort Alexandria to the west right on the route of the Indians, hence cutting off his trade (HBCA, PAM, B. 159/a/3, fo. 12). Charles Isham at Carlton House wrote to Mr. Josh Colan of Swan River House, stating that the trade of next year would fall short, as there was such a number of different interests from Canada (HBCA, PAM, B. 28/a/1, fo. 27-27d). The Carlton House Journal for 1796-97 reads:

> ...one of their houses [Alexandria] is within one hundred yards of me - so that I do not wonder that the Companys Settlement here make so little Trade -
> (HBCA, PAM, B. 28/a/3, fo. 6d).

Also in 1799, the HBC found that Albany House had burned and were informed by the Indians "that it was the Canads that Destroyed it -" (HBCA, PAM, B. 159/a/5, fo. 3).

In addition to placing themselves alongside their competition the NWC also sent out "runners" to gather furs from the Indians. Sutherland at Carlton House complained that the NWC had so many men that knew where the Indians hunted and went out to take the furs from them (HBCA, PAM, B. 159/a/3, fo. 12).

The HBC soon adopted this practice and, in 1798, Robert Longmoor at Carlton House states:

> ...at 9 A.M. came to some Indians that was tenting across the River made a bridge to cross to them traded 39 MB Before the Canadians came up - the Indians informed me that they was going to stay so I left, Adam Kertness with the Indians to get their Skins as they Killed them...
> (HBCA, PAM, B. 28/a/4, fo. 15).

Relations between the two concerns were not always cordial. Sutherland at Albany House in 1797-98 records that the Canadians were always "abuseing and insulting" him because the Indians traded him the debts owing to the Canadians and wished he had more trading goods so as to "vex them a little more" (HBCA, PAM, B. 159/a/4, fos. 7, 9). Archibald McCleod, in charge of Fort Alexandria (NWC) in 1800 regards Sutherland as dull and ignorant, who behaves the worst of any "Puppies" he has seen when drunk and refers to him as "Sugar Royall" (Gates 1965: 138, 159).

Apart from the competition and insults of the NWC and the Independents, the two HBC posts, Carlton House (supplied from York Factory) and Albany House (outfitted from Albany Factory) competed against each other. In the 1797 Carlton House Journal sent to London, Longmoor refers to Sutherland (Albany House) as collecting debts due to the Swan River District and behaving "in a worse manner than a Canadian" (HBCA, PAM, B. 28/a/4, fo. 9d). This caused the Governor and Committee to write on May 31, 1799 to John McNab and council at Albany Factory:

> We observe from the Journals that the People from your Factory lately got so far up Red River as to meet those of York where one Party opposed the other in their Trading.
>
> Need we point out to you Measures more repungent (sic) to the Interest of the Company? It has been our invariable orders, as we are almost tired with repeating them, that our several Factories should pursue different directions in their Journies Inland, they no means interfere with the Trade of each other. If this Conduct is suffered to continue the Consequence resulting from it will be far more injurious to Us than the utmost Efforts of our Canadian opponents.
> (HBCA, PAM, A. 6/16, fo. 69d).

In 1805 Albany House was closed and Albany Factory left the Assiniboine area permanently.

Towards the end of the 1790s and the beginning of the late 1800s the number of rival posts in the Upper Assiniboine River area decreased with one to three posts operating at any one time. However, by 1818 the fierce competition of the 1700s may have been taking its toll on the beaver population of the area. In the District Report for 1818-19, Wm. H. Cook observes that:

> When Swan River Settlement was first established about the year 1789 or 90 The Country abounded in Beaver and other Furs but since that period a gradual decline has been observed and for which no satisfactory cause had been assigned - the Beaver may have suffered by the increase of population and the unceasing call for the article by the Fur Traders...
> (HBCA, PAM, B. 159/e/1, fo. 4d-5).

In 1821, both the HBC Fort Hibernia and the NWC Fort Alexandria were closed and no posts were established in the immediate area until Fort Pelly 1 in 1824. The Indians of the district were served by Qu'Appelle Post, Fort Carlton and Swan River Post (HBCA, PAM, D. 4/99, fo. 47d).

## 3.2 Events Affecting the Establishment of Fort Pelly 1

Fort Pelly 1 was established in response to the various problems facing the HBC. The coalition of 1821 had resulted in: a surplus of posts and personnel; a despondent attitude among the Indians over the loss of competition; and the disposal of surplus stock. Additional problems faced by the HBC included: the high prices paid to Indians for goods as a result of previous competition; the generous use of spirits in trade; and the dependence upon the Plains Indians for provisions. Also, past occurrences in the Red River Settlement and Upper Red River Department which included competition from Metis and free traders acquiring goods from the Company shop, competition from American traders, decline of fur bearing animals in the area, and the combining of the Swan River and Upper Red River Departments into one under the name of the former, with one major post, were important reasons for the setting up of the post.

Many of these problems including the dependence upon the Plains Indians for provisions, the decline of fur bearing animals, the continual use of spirits in trade, and the competition from Metis, free traders and the Americans, continued to plague Fort Pelly 1 throughout its existence.

## 3.3 Coalition

By 1821, both the HBC and NWC were showing financial strain from the continuous rivalry and keen competition between them. The coalition of the two companies which took place in London, March 2, 1821 (Morton 1973:624) granted the HBC a monopoly in Indian Trade in any part of British North America, exclusive of the two provinces of Canada and Rupert's Land, where the Company retained exclusive rights by virtue of its Charter (Williams 1970:45; Rich 1960:404; Rich 1967:240).

Accompanying the Coalition Agreement, another document, the Deed Poll, was constructed which explained the arrangements which were to be adopted (Morton 1973:624; Rich 1967:241) and under which Fort Pelly 1 was to operate and function.

Two departments, the Northern, which included:

> Lac La Pluie and all Posts upon the Waters of the River Winipic and Wunusky and Severn River and all the country to the westward of the Albany Country, including the Columbia and Caladonia and the Country to the westward of the Rocky Mountains as well as on McKenzie's River
> (Fleming 1940:32).

and the Southern, which was to encompass:

> ...all the Country to the Eastward of the above line, including Fort William & the Country on the Northern Shores of Lakes Superior and Huron, Temiscaminque, the Ottawa River, the Seigniories (Fleming 1940:32).

were to be established to conduct the trade in British North America. Each department was to have an appointed Governor and a council composed of Chief Factors who were to arrange the business for each season for their department (Rich 1967:242). Two ranks were recognized, that of Chief Factors and Chief Traders. These were considered as partners of the Company and were to share forty percent of the profits of trade.

Chief Factors (CF) and Chief Traders (CT) who resided at Fort Pelly 1 included: CT Allan McDonell (1824-1826); CF John Clark (1826-1830); CF Colin Robertson (1830-1832); CT William Todd (1832-1843); CT Cuthert Cummings (1843-1844); Clerk, Henry Fisher (1844-1845); CT William Todd (1845-1849); CT Nicol Finlayson (1849-1850); CT William Todd (1850-1851); CT Alex Buchanan (1851-1852); CF William Christie (1852-1858) (Klaus 1961; HBCA, PAM, B. 159/a/8-18).

Along with its gain in expanded trading areas and monopoly of trade, the HBC acquired a number of problems arising as a consequence of the coalition. Internal problems faced by the HBC after the coalition consisted of: (1) surplus posts and personnel - about twice as many as needed; (2) high prices paid to the Indians for their furs as prices had risen "recklessly" during competition prior to 1821; (3) the irresponsible and generous use of spirits in the trade with Indians; (4) the despondent attitude that might arise among the Indians in response to the loss of competition due to the union; (5) the dispersal of surplus stock remaining on hand from the period of competition; (6) the hunting of beaver, cub beaver and valuable fur animals in summer and when out of season, leading to the denuding of many areas (Williams 1970:46; Rich 1960:469-491; Innis 1970:287-289).

In response to the first problem of surplus posts and personnel, the Company began to close a number of posts belonging to one company or the other. In the Upper Assiniboine River area, both Fort Hibernia (HBC) and Fort Alexandria (NWC) were closed. The surplus personnel resulting from this practice, plus the numerous Metis children whose parents had died or deserted them were to be removed to the Red River Settlement at the Company's expense (Morton 1973:672; Innis 1970:288).

With respect to the problems of Indian attitudes and response, and the high prices of furs, the Governor and Committee offered George Simpson the following suggestions in 1822: (1) in order to prevent the Indians from believing they would suffer from the absence of competition, the standard of trade was to be increased 20-25%; (2) the system of presents to the Indians was to be abandoned, except in special circumstances; (3) the Indians were to be encouraged in hunting by giving a liberal price for their furs and abandoning the presents and treats which they were accustomed to receiving whether they brought in a good hunt or not; (4) large credits were not to be given to the Indians. The above changes were to be made with discretion (HBCA, PAM, A. 6/30, fo. 16).

A section of the Licence for Exclusive Trade in 1821 called for the cutting down of spirits (Rich 1960:477). Although this was desirable, George Simpson realized that without supplying spirits to the men with which to trade, very little, especially provisions, would be gained from the inland Indians. Therefore, spirits would remain a necessary staple of trade as long as the fur trade remained dependent on the Indian for provisions (Rich 1960:477). This was especially true on the Plains, where one observer states that:

> ...In the plains...they can live independent of us, and by witholding ammunition, tobacco and spirits, the Staple articles of Trade, for one year, they will recover the use of their Bows and spears, and lose sight of their smoking and drinking habits: it will therefore be necessary to bring those Tribes round by mild and cautious measure which may soon be effected.
> (Innis 1970:207-208).

Regarding the surplus of stocks in hand, George Simpson and the Council agreed to keep only one year's supply on hand at the depots, such as York Factory, as insurance against failure of the ship.

One of the major concerns of the Committee in 1821 was the hunting of cub beaver and beaver in all seasons by the Indians leading to a decline of these fur bearing animals. Due to the gravity of the situation, Simpson and the Council made every effort to persuade and encourage the Indians to abandon these destructive practices. However, this proved a difficult task for the Indians considered cub beaver a delicacy and beaver were more easily caught in the summer than winter (Ray 1974: 199; HBCA, PAM, D. 4/89, fo. 16). Also, in times of scarcity, Indians would kill beaver whenever they happened upon them (Ray 1974:199). The use of steel traps was condemned in order to reduce the effectiveness of Indian trapping operations, which Simpson and the Committee saw as a factor contributing to the decline of beaver populations (Rich 1960: 471; Ray 1974:199).

In addition to the above efforts, Simpson also began shifting trading posts around within districts in accordance with fluctuations in fur resources (Ray 1974:199). In 1824 Simpson reported that the Upper Red River District was nearly exhausted of fur bearing animals and the posts could not be kept up under such a heavy expense and, therefore, he saw it expedient to abandon the department entirely (HBCA, PAM, D. 4/87, fo. 11d). As a result he decided that the Swan River Area and Upper Red River Department were to be combined into one retaining the name of the former and the whole business was to be concentrated into one post, Fort Pelly, "situated at the 'Elbow' near the head of the Assiniboine River" (HBCA, PAM, D. 4/87, fo. 47d).

By 1826, Simpson notes that the beaver are appearing again on the Assiniboine River, but improvements are slow and if left undisturbed, important advantages will result (HBCA, PAM, D. 4/89, fos. 29d-30).

Because of its location, Fort Pelly experienced many of the problems outlined above. It was situated in an area which had witnessed intense rivalry between a number of posts providing the Indians with various trading options. The post relied heavily for provisions upon the Plains Indians who were accustomed to receiving spirits and did not depend upon the post for their survival.

## 3.4 Red River Settlement and Red River District

Due to its close proximity to the Red River Settlement and District (500 km), Fort Pelly 1 experienced problems with free traders operating from the settlement and using American goods and with the disgruntled and troublesome settlers, especially the Metis.

In 1812, the HBC granted Lord Selkirk a large tract of land (116,000 sq. mi) in the Upper Winnipeg basin (Williams 1970:39; Morton 1973:535). Lord Selkirk's plan was to establish a settlement on the Red River to accommodate immigrants from distressed areas in Scotland and Ireland (Williams 1970:39). The HBC viewed the idea favourably in that the settlement would provide an outlet for time-expired servants, many of whom had large native-born families and had no desire to return to the British Isles (Williams 1970:39). Selkirk had to agree to provide land for retired servants and to guarantee that the settlers would not participate in the fur trade in order to allow the HBC to establish posts in uncultivated areas of the grant. The Company, on the other hand, agreed to pay the settlers' transport from York to Assiniboia, provide stores, seed corn and seed potatoes from Brandon House and to organize a supply of horses (Rich 1960:301).

Another advantage for the HBC of an agricultural establishment at Red River was that the settlement would interfere with the acquistion of provisions (pemmican) by the NWC from the plains in that area -- provisions needed to supply the NWC outfits advancing into the Athabasca

(Williams 1970:39). This competition for provisions is referred to as the Pemmican War. The Northwesters, on the other hand, encouraged Metis parties to raid the settlement and also intercept pemmican brigades from HBC provision posts, for example the Qu'Appelle Post (Rich 1960:326; Morton 1973:62). With the support to the NWC the Metis continued to raid the settlement and to run the buffalo on horseback, killing them in great numbers and often stampeding them beyond the reach of the Indians and colonists who hunted on foot (Rich 1960:321). At one point in 1816, active violence broke out when Governor Semple and nineteen settlers were killed at the Massacre of Seven Oakes by a group of approximately sixty mounted Metis in war paint lead by Cuthbert Grant (NWC) (Rich 1960:327; Morton 1973:577; Ross 1957:35-36).

Re-establishing stability in the settlement in the next several years was a formidable task. In addition to the Metis threat, grievances harboured by the various groups, Scottish, de Meurons, Canadians, and Metis, resulting from the differences in lifestyles also became prevalent. The settlement was characterized by unrest, lawlessness, disorder, mismanagement, and a laissez faire attitude on the part of the administration (Morton 1973:641). The store distributed goods and provisions on credit to anyone requesting them and kept no records of the transactions.

With the coalition of 1821, the HBC attempted to re-establish law and order and their first reform was the closing of the Colony Shop (Morton 1973:650). But Governor Andrew Bulger of the settlement persuaded the HBC to reverse the 1821 decision forbidding all retail trading except at the HBC store and to acknowledge that the HBC was not the ruler of the Colony (Morton 1973:655; Rich 1967:250). The colonists now had the freedom to trade with Indians for all necessities, except furs (Morton 1973:655). This meant that much of the settlers' trade goods and supplies came up from the United States, especially spirits and tobacco, for the former was reserved and sold only by the Company to its servants in the colony (Rich 1967:250).

However, by 1824, due to grasshopper plagues, scarcity of buffalo at times, prairie fires and the hostility of the Sioux, the situation of the settlers had not improved. Settlers were still disruntled and the Metis and the free traders were intensifying and disrupting the peace and trading with the Sioux and the Americans. Many of the Metis were residing in the Pembina area, receiving supplies from the post there which was on American territory. Apart from proposing to destroy the post at Pembina, Simpson recommended that small outfits be given to a few retired traders and interpreters, in order to collect skins from the Indians, for which the HBC would give them liberal prices. The reasoning behind this was that the traders, who would not be identified with the HBC, in their vigilance to collect every skin possible would harass the Americans along the frontier (HBCA, PAM, D. 4/87, fo. 9).

In addition to the problems of the Sioux and the Metis and American competition, the HBC also encountered problems from free men, petty traders and settlers. The settlers took advantage of the resolution allowing them to trade provisions and leather from the Indians by acquiring goods cheaply at the HBC shop and then trading them under the regular standard of the HBC for provisions, leathers, and "every skin possible" (HBCA, PAM, D. 4/87, fo. 9). And because of the establishment's large population and extended area, it was difficult to keep a check on such practices.

In order to deal with the Indian trade connected with the Settlement the Governor and Council decided to abandon Brandon House in the spring of 1824, since the Indians belonging to that post had moved to the neighbourhood of Pembina to trade with the freemen, settlers, and Americans, and to maintain the post at Qu'Appelle. However, that winter, an Assiniboine at Qu'Appelle murdered a servant of the Company which forced Simpson and the Council to review the state of the Upper Red River department in general (HBCA, PAM, D. 4/87, fo. 10d).

Prior to the coalition of 1821, the Upper Red River department maintained three establishments on the upper part of the Red River: (Fig. 7), Brandon House, Qu'Appelle and Hibernia. Hibernia was closed at the time of the coalition, and Brandon House and Qu'Appelle continued until 1824, at which time both posts were abandoned. This was due to the competition from the free traders, settlers and Americans and the instructions from the Governor and Committee that the posts were bound to take provisions from the settlement (HBCA, PAM, D. 4/87, fo. 11). These instructions proved disadvantageous to the Company, as the Plains establishments were able, on their own, to furnish twice the quantity of provisions required for the trade, but could not collect enough marketable produce (furs) due to the exhaustion of fur bearing animals inhabiting the Red River District to defray the heavy expenses required for their maintenance (HBCA, PAM, D. 4/87, fo. 11, D. 4/99, fo. 46). Simpson and the Council proposed to abandon the Upper Red River Department altogether and turned their focus on the neighbouring department, that of Swan River (HBCA, PAM, D. 4/87, fo. 11d).

The Swan River department in the days of competition, maintained four establishments, that of Swan River, Fort Hibernia (in the Upper Assiniboine River area), Fort Dauphin and Manitobah (HBCA, PAM, D. 4/99, fo. 47d) (Fig. 7). At the time of the union, Fort Hibernia was closed, while Fort Qu'Appelle was maintained as it was found that the Indians of that area could be supplied at Qu'Appelle and Carlton and the Thickwood Indians at Swan River (HBCA, PAM, D. 4/99, fo. 47d). In 1824, the state of the Swan River Department was little better than that of Upper Red River. The department maintained three posts, those of Swan River, Fort Dauphin and Red Deer River, but the return of furs for the last few years decreased so much that trade was very unprofitable (HBCA, PAM, D. 4/87, fo. 11d). Simpson and the Council directed their attention also to the reduction of this Department. The Red River Department was abandoned altogether as were the posts of Fort Dauphin, Swan River and "Red Deers River" (HBCA, PAM, D. 4/87, fo. 11d). The Swan River and Upper Red River Departments were combined into one,

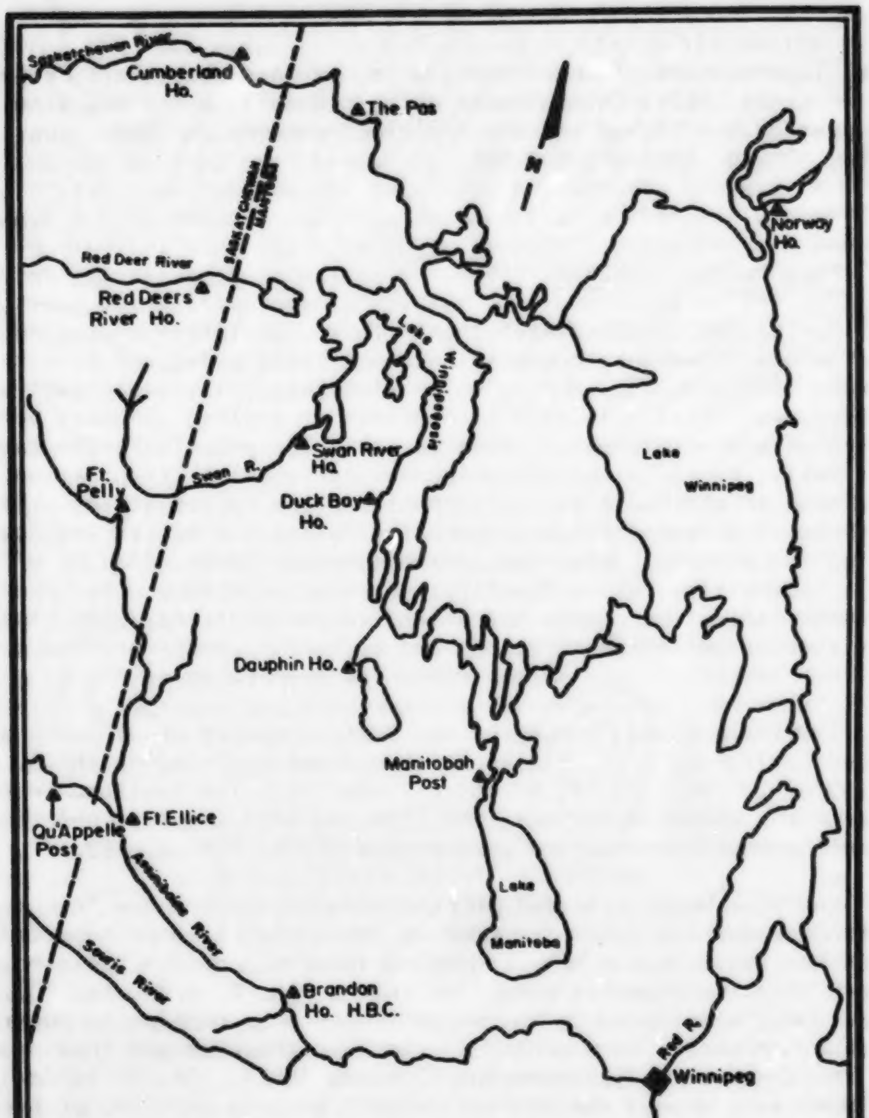

Saskatchewan River
Cumberland Ho.
The Pas
N
SASKATCHEWAN
MANITOBA
Norway Ho.
Red Deer River
Red Deers River Ho.
Lake Winnipegosis
Swan River Ho.
Swan R.
Ft. Pelly
Duck Bay Ho.
Lake Winnipeg
Dauphin Ho.
Manitobah Post
Qu'Appelle Post
Ft. Ellice
Assiniboine River
Lake Manitoba
Souris River
Brandon Ho. H.B.C.
Red R.
Winnipeg
MANITOBA
U.S.A.
Ft. Pembina
0
100 km

Figure 7. Posts in Swan River and Upper Red River Districts. (map adapted from MacGregor 1966:xii).

retaining the name of the former, with one main post, Fort Pelly. On September 21, 1824, Chief Trader Allan McDonell, chose the site for the new post on the "Elbow" of the Assiniboine River and began construction (HBCA, PAM, B. 159/a/8, fo. 9d).

## 3.5 Fort Pelly 1, 1824 - 1856

Morton (1973:690) states that with the coalition of the HBC and NWC, an era of intense competition and rivalry ended and that the period between 1821 and 1850, during which time Fort Pelly was established and existed, was relatively calm with events at individual posts being "conventional and monotonous." However, this was not always the case at Fort Pelly, owing to the circumstances surrounding its creation and its proximity to the Red River Settlement and the United States. Fort Pelly 1 was to be a temporary post operating during the winter and abandoned during the summer in order to lessen expenses (HBCA, PAM, D. 4/89, fo. 46d). Activities during the first years of existence were concentrated on establishing the post's operations in the district, with respect to subsistence and Indian relations and alliances, and improving conditions for the recovery of beaver and other fur bearing animals.

The Indians who frequented the post, numbered about 2,000 and included Saulteaux, Cree, Plain, Thickwood and Assiniboine (HBCA, PAM, B. 159/a/12, fos. 47d, 7, B. 159/e/2, fo. 1). The Saulteaux were considered the most industrious, the Cree the most insolent and the Assiniboine the most numerous and underhanded (HBCA, PAM, B. 159/e/2, fo.1).

The post was successful in discouraging Indians and free men from hunting beaver and other fur bearing animals as Simpson reported in 1826 that beaver again were beginning to appear on the Assiniboine River. But improvements were slow (HBCA, PAM, D. 4/89, fo. 30). Any success was attributed to the shift from beaver hunting to muskrat hunting. Muskrats were on the increase in the area and they provided the Indians with a viable medium of trade (HBCA, PAM, B. 159/e/3, fo. 1). The post also served the HBC's strategy, adopted in 1821, of reducing the number of posts and personnel in various areas to minimize expenses of the fur trade. About 20-30 persons were required to carry out the affairs at Fort Pelly, compared to the 100 employed in the Upper Red River and Swan River Districts after the coalition (HBCA, PAM, D. 4/89, fo. 29d). George Simpson was pleased with the changes effected, and in 1825, reported to the Governor and Committee that "exhausted tracts of country were allowed to recruit a very heavy expense in wages saved" and that muskrat had been the staple article of trade in the District (HBCA, PAM, D. 4/7, fos. 144d-145).

Fort Pelly 1 thrived and grew throughout the 20s: buildings were constantly being improved and constructed; gardens producing potatoes, cabbages and barley were planted; muskrats were abundant; and cattle were introduced and bred (HBCA, PAM, B. 159/a/8, fos. 34d, 35, 35d,

B. 159/e/3, fo. 3). The acquisition and upkeep of the cattle at the post, however, caused Governor Simpson and the Council some concern. It appears that a Mr. Stuart sent, at his expense, three cows and a bull to Fort Pelly in 1826, which were later to be taken to Carlton. However, when the men arrived for the cattle, Chief Factor John Clarke refused to part with them, and bought them from Mr. Stuart. He kept them at the expense of the Company and then privately sold them for a profit (HBCA, PAM, B. 159/b/1, fo. 16). In 1831, Simpson and the Council decided that the remaining stock was to belong to the Company and Chief Factor Robertson was advised not to pay for nor to dispose of any part of the stock (Fleming 1940:287; HBCA, PAM, B. 159/b/1, fo. 16). In 1857, Palliser visiting the post commented on the fine breed of domestic cattle there (Palliser 1863:59).

The favourable trade, enjoyed by the post in the 20s, principally in muskrats, was waning by 1830, and in 1831, they were almost extinct and other furs were not increasing. In 1831, Chief Factor Colin Robertson reported to York Factory that last year his returns exceeded £7000, while this year they would hardly amount to £100 (HBCA, PAM, B. 159/b/1, fo. 1). To make matters worse, the 'provision' trade of the post was less, due to the mild winter which prevented hunters from obtaining quantities of fresh venison, so that Fort Pelly had to be supported on meat intended for York Factory (HBCA, PAM, B. 159/b/1, fo. 1). With the decrease and near extinction of muskrats and other fur bearing animals and the scarcity of provisions encountered, the post's usefulness to the Company was in question.

To make matters worse, Fort Pelly, which was to be merely a temporary post, had become one of the most expensive permanent establishments in the country, with the "different gentlemen" in charge of the post, exhausting their ingenuity and wasting means in embellishments and fanciful improvements (HBCA, PAM, D. 4/99, fo. 47d). These included the enlargement of the post with the addition of a number of buildings and the acquisition of a fine herd of cattle. Despite the unfavourable conditions existing in the district and the expense of maintaining the post, Simpson defended its continuance to the Governor and Committee. With respect to the expenses and growth of the post, Simpson proposed that while muskrat hunts were productive in the years 1827, 28 and 29, this supported the increase of expenses, but now that trade had fallen off, the post was to be reduced to "the footing it was originally intended" and to be maintained for the winter only (with a small complement of people, not exceeding eight or ten in all) (HBCA, PAM, D. 4/99, fo. 47d). During the summer the men would be engaged with the transport of goods to the depot at York Factory.

The post was maintained even though fur returns had fallen, because of the Americans who, since 1826, were within reach of the Indians. This forced the HBC to meet the Indians in "the heart of their hunting ground" (HBCA, PAM, D. 4/98, fo. 22d). George Simpson's report to the Governor and Committee in 1831 outlined and defined the factors affecting the trade and hence the importance of maintaining Fort Pelly:

(1) the post was frequented by the Assiniboine and Plains Cree who were independent in their trade and disposed to be troublesome when they could venture to take liberties; (2) these Indians moved in all directions over the plains between the Assiniboine and Missouri chasing buffalo, with little attention to fur hunting; (3) these Indians more regularly visited the American posts on the Missouri, on account of the buffalo being more numerous in that area; and (4) the American posts provided a ready market and better price for the buffalo robes eliminating the necessity of the Indians dragging them several hundred miles overland to the HBC for a lesser price (HBCA, PAM, D. 4/98, fo. 23).

The independence of the Plains Indians and the close presence of American competition necessitated the continuance of the practice of distributing spirits to the Indians arriving at the post. If discontinued, the Indians would simply acquire spirits elsewhere, either from the Americans or the free traders of the Red River. Constant reference is made in the journals to their receiving of spirits and partying before proceeding to trade. Therefore, the practice of presenting spirits to encourage the Indians to trade their furs and provisions and to return the following season remained in effect throughout the post's existence. George Simpson in 1839, reported that the Indians could not be induced to furnish provisions without liquor and that the HBC as a measure of self-preservation had to continue this indulgence at the provision posts in the Swan River and Saskatchewan Districts (HBCA, PAM, D. 4/106, fo. 31).

Effects of American competition upon the trade and the Indians were being felt and noted by the Company and the post in the late 20s. As early as 1826, seventeen American posts were listed in the upper Mississippi country and the interests represented included the American Fur Company, the Columbia Fur Company and the Cheyenne American Fur Company (Rich 1960:519). In 1828, Brandon House was re-occupied to protect the trade of the area by keeping the natives from visiting the Americans at Pembina and in 1829, the post journal entry for Fort Pelly records that a group of Assiniboine Indians who had just left the post had for some years been attached to the Americans. These Indians reported that: the Americans were strong at their trading posts; had several free "churns" of spirits; and gave a gun for four robes, a thin point blanket for two robes (HBCA, PAM, B. 159/a/10, fo. 18).

American competition continued and increased throughout the 30s and 40s with the establishment of a major depot of the American Fur Company at Fort Union (HBCA, PAM, B. 159/a/13, fo. 31) in 1829 at the forks of the Missouri and Yellowstone Rivers (Wishart 1979:54). The distance from the post to the Qu'Appelle, did not exceed 300 miles, and the Americans were in the practice of sending parties across to trade with the Indians, mainly the Assiniboine and Plains Cree of that neighbourhood (HBCA, PAM, D. 4/99, fo. 47). In response to this threat, Fort Ellice was established in 1831, in the Upper Red River District to keep the Cree and Assiniboine from trading with the Americans who had a post on the south side of Turtle Mountain (Morton 1973:703). In

1831, due to the opposition which arose between Fort Pelly I and Fort Ellice, Ellice was attached to the Swan River District with the whole under the charge of Chief Trader Todd at Fort Pelly (HBCA, PAM, D. 4/99, fo. 98). The small wintering posts of Manitobah, Fort Dauphin and Shoal River, established when muskrats were numerous, were now being kept to divert Indian trade from the Americans at Pembina (HBCA, PAM, D. 4/98, fo. 23d). Also, a house was built at the Beaver Hills in 1831, and one at Qu'Appelle to accommodate the Indians of those areas (HBCA, PAM, B. 159/a/13, fo. 21).

In 1832, the Council passed a resolution stating that the chief factors and traders were to encourage the returns in buffalo robes "in order to withdraw the plain tribes from the American Establishments on the Missouri" (HBCA, PAM, D. 4/99, fo. 66d). American competition continued to intensify, especially in the Rainy Lake District, at Lake of the Woods, at Whitefish Lake and at Swan River. In 1833, Simpson arranged an agreement with the American Fur Company whereby the HBC paid them £300 a year not to interfere with the Indians north and west of Lake Superior (Rich 1960:525; Innis 1970:330). The agreement was extended for two more years in the 1840s when the two companies agreed to oppose the Cleveland Company (Rich 1960:526; Innis 1970:330). Despite these efforts, the Americans acquired much of the Indians' furs and pressured the posts to exert all their energies and resources to obtain the Indians' trade. Constant reference is made to the Americans' competition, tactics, and location in the post journals from 1832 to 1836. In 1832, Chief Factor Robertson notes that:

> If there was no opposition on the Banks of the Missourie, the Indians might remain undisturbed and be allowed to Make their periodical visits to Such of our Establishments as best suited their conveniences. But in the present State of affairs, while an Indian holds his Winter Hunt even in Wolves & Robes and finds himself on the dissolving Snow, at an equal distance from Forts Union, Pelly & Qu'Appelle, in my opinion a full or an empty hand, would have influence in directing his cause on this principal I have used my utmost Exertions in collecting everything in the Shape of furs...
> (HBCA, PAM, B. 159/a/13, fo. 31).

and in 1835, Chief Trader William Todd remarks that:

> ...it is Certainly very true that the Americans have every advantage from their situation, as the great body of Assiniboine can go to their Fort in three or four days, either this place or Beaver Creek would take them from 12 to 15 days...
> (HBCA, PAM, B. 159/a/16, fo. 14d).

The Americans induced the Indians to quit their old hunting grounds and traders by offering high prices. In order to protect the trade, Simpson, in 1845, was forced to increase the prices given for furs and to strengthen the posts by additional servants (HBCA, PAM, A. 12/2, fo. 548). However, he feared that due to the "captivating novelty of opposition" they would still lose many furs (HBCA, PAM, A. 12/1, fo. 548).

Moreover, the attraction of competition presented by the Americans brought together a number of Indian groups which served to increase hostilities amongst them, the consequences of which proved disruptive to the trade in the Swan River District, as they did not feel that they were on their own land when visiting the American posts and "that by remaining there they would run the risk of becoming involved in difficulties with the Crow, Mountain, Fall, and other tribes" (HBCA. PAM, D. 4/99, fo. 47). Throughout the 30s alliances between the Indians were constantly being made and changed and war waged either against the Americans or among Indian groups (Klaus 1961:82). In 1831, an Indian visiting Fort Pelly reported that the Assiniboine had quarrelled with the Americans and that the Assiniboine had now made peace with the Blackfoot and are going on war excursions with them (HBCA, PAM, B. 159/2/12, fo. 28d). In 1835, Todd reported that the Crees and Assiniboines joined to war on the Blackfoot and were about 3,000-4,000 strong (HBCA, PAM, B. 159/a/12, fo. 28d).

Attacks by various Indians raiding parties were not always restricted to the Americans or other Indian groups. HBC men were often exposed to danger of attack as well. At Brandon House in 1832 two men were killed by the "Mandrals" (Mandans) who, not being able to revenge the deaths caused by the Crees, retaliated by killing the Whites from whom the Crees got their supplies (HBCA, PAM, B. 159/a/13, fo. 14). In 1832, the Mandans again attacked a number of people near Brandon House, and in the skirmish, a number of Mandan were wounded and killed (HBCA, PAM, B. 159/a/14, fo. 5). The HBC men believed that the American traders in the Missouri had encouraged the Mandan attacks of 1831 and 1832 in the Brandon House area (HBCA, PAM, B. 159/a/14, fo. 5). Fortunately, attacks upon the posts were rare, but the lure of battle and the spoils of war served to disorganize the Indians attached to various posts and to disrupt trade, because Indians devoted much time and energy to preparations for war which might otherwise have been spent in obtaining furs.

The wars and raids of the Assiniboine and Cree diminished and then ceased by 1837 with the outbreak of the small pox epidemic. Indians arriving at Fort Pelly on September 20, 1837, reported "that some bad disease has got into the American Fort in Consequence of which their gates are kept Constantly shut and no Indian allowed to enter" (HBCA, PAM, B. 159/a/17, fo. 2d). Chief Trader William Todd suspected that the disease was small pox and on September 21, he gathered the Indians and explained to them the dangers they would incur if the disease got among them and immediately obtained their permission to vaccinate them (HBCA, PAM, 159/a/17, fo. 2d; Ray 1974:188). Contradictory reports as to the disease and its occurrence were circulating in the succeeding months, but Chief Trader Todd at Fort Pelly took no chances and vaccinated all the Indians at the post, and taught several Indian leaders how to vaccinate their fellows (HBCA, PAM, B. 159/a/17, fo. 6; Ray 1974:190). By December, a dispatch delivered by two men from Carlton confirmed that the disease was small pox, which had already claimed a great number of the Plains Indians in the Saskatchewan. All doubt was removed when one of the two men from Carlton, Pierrre La Rosque, came down with the disease and died at Fort Pelly on January 5, 1838 (HBCA, PAM, B. 159/a/17, fo. 11; Ray 1974:190).

Due to the precautions and quick actions of Chief Trader W. Todd and others in the area, the Indians of the Swan River District were largely spared. The Americans fared badly from the epidemic and their trade suffered greatly as the Indians associated the disease with them and were afraid to go there. Reports of American posts being abandoned because three-fourths of their trade was "cut off" by small pox, were being circulated, and the trade at Fort Ellice showed an increase for that season, 1837-38 (HBCA, PAM, B. 159/a/17, fo. 21).

The American operations at Fort Union and Pembina posed only one source of competition for Fort Pelly. The post also encountered opposition from the Metis hunters and free traders who resided in or frequented the area, disorganizing the Indians who obtained supplies from Red River or the Americans. As early as 1832, Simpson realized the potential danger to the trade of that district by the large population of Metis residing in Swan River. The plan of the Metis was to settle in the area as agriculturalists, form a village, and encourage their friends from Red River to join them (HBCA, PAM, D. 4/99, fo. 48). Simpson viewed this as a threat to the trade; since no market existed in the Swan River for their surplus produce, they would revert to the Americans, obtaining supplies from them at Pembina and then return and "lay themselves out for trade, penetrate into the heart of our most valuable hunting grounds [and] disorganize our best disposed Indians..." (HBCA, PAM, D. 4/99, fo. 48). He advocated that the settlement be broken up immediately and the inhabitants sent to Red River (HBCA, PAM, D. 4/99, fo. 48d; Rich 1960:518).

Removal of the Metis to the Red River settlement did not lessen the problems of free traders in the district. At Red River, the traders had easy access to Pembina, a few miles south of the border, which was the greatest centre of illicit trade and the easiest source of fur trade goods to be sold in the Red River stores or to the Indian and Metis (Rich 1960:533). There are constant references to free traders being encouraged and outfitted by the Americans from Pembina in Simpson's report in 1848:

> It appears that a half-breed from Red River outfitted from the American posts at Pembina, made his way secretly to the neighbourhood of Fort Pelly in the early part of the winter, and secured

> the hunts of a good many Indians...
> (HBCA, PAM, A. 12/4, fo. 152).

and in 1849:

> ...Trade of...Fort Pelly...much disorganized during the winter by the presence among the Indians of the Red River half-breeds, taking with them supplies of goods and liquor, who set the Company's chartered rights of trade at open defiance and succeeded by intimidation, misrepresentation and other means, in collecting a great many furs, a large proportion of which was taken to the American traders at Pembina, who had outfitted these people...indeed the competition ran so high that I think both the Americans and the Hon. Company will, in that part of the country, lose money by the business of that past winter.
> (HBCA, PAM, A. 12/4, fo. 518d).

Simpson believed that the Americans continued at Pembina in order to pressure the HBC into an agreement to divide the frontier trade with them, which would prove more profitable to the Americans than to the HBC (HBCA, PAM, B. 159/a/18, fos. 30d, 40, 41d).

In the 50s opposition from the free traders in Red River continued, and Simpson proposed to strengthen the post with additional men and larger outfits and to place a trader with three or four "runners" in the principal Indian camps during the winter to collect the furs as they were hunted (HBCA, PAM, A. 12/7, fo. 143d). In his 1856 report to the Governor and Committee, Simpson summarized the existing state of affairs at Swan River/Fort Pelly thus: (1) Fort Pelly was to secure the trade whatever the cost might be; (2) the Indians were to be treated with greater "liberality in the way of gratuities"; (3) the Indians appeared to stay with the Company owing to the superiority and completeness of their orders, containing goods which the free traders could not afford, such as guns, ammunition, iron-works, etc. (HBCA, PAM, A. 12/8, fos. 119-119d).

The HBC in the Swan River District lost a large amount of furs in the 1850s to the free traders. The Company was also under the necessity of employing Metis settlers, principally from Red River. These employees were active, hardy and well adapted to the services of the trade, but when they had to compete with other Metis, they could not be relied upon as they often played into the hands of the free trader, whom they "almost invariably" joined upon termination of their engagement (HBCA, PAM, A. 12/8, fos. 485-486d). In addition to free traders from Red River, the Swan River District in the 50s was also visited by free traders from St. Boniface (Manitoba):

> Troubled with strong opposition in the neighbourhood...Escapot (Isidore Dumont), Louis Batoch (sic), Joseph Laboucanne, Emmanuel Champagne, Abraham Belanger...in the neighbourhood of Fort Pelly. (Payment 1979:85).

Besides the regular posts of Shoal River, Manitoba Post and Fort Ellice, a number of other posts were established and abandoned or moved to deal with the free traders. In the 1850s these included the posts of Touchwood Hills, Guard, Qu'Appelle, Egg Lake, Shell River and Last Mountain (Klaus 1961:89).

## 3.6 Daily Existence at the Post

Aside from the American and free traders' competition and threat of Indian raids, the daily life at the post differed little from other HBC posts. The main activity consisted of gathering, trading and transporting furs. The furs collected varied in number and type throughout the years, depending upon availability and competition. In the 20s, muskrat was the staple article of trade, but by 1831, had decreased to the point of extinction (HBCA, PAM, B. 159/b/1, fo. 1). Attention in the 30s was focused on the acquisition of buffalo robes, in order to attract the Plains tribes from the American posts (HBCA, PAM, D. 4/99, fo. 66d, D. 4/103, fo. 20d). Buffalo robes and provisions remained a main item of trade throughout the 40s and 50s. In 1850, the post suffered a temporary decrease in buffalo robes "owing to the whole plain between the Saskatchewan and Missouri being on fire" (HBCA, PAM, A. 12/4, fo. 155d) and the resultant high mortality of the herds. This was countered by an increase in buffalo robes in the 50s with 5,642 being collected in 1856 (HBCA, PAM, A. 12/8, fo. 119d).

Apart from the acquisition of buffalo robes and provisions, smaller furs, mainly marten, lynx, wolf and muskrat (HBCA, PAM, A. 12/7, fo. 143, A. 12/3, fo. 446d) were also traded. In 1854, the list of furs traded included black bear, brown bear, grizzly bear, beaver, buffalo robes, fishers, red fox, mink, muskrat, wolf, dressed moose skins, otter, lynx, martens and beaver (HBCA, PAM, B. 159/a/18, fos. 30, 31d). The Indians collected these furs during the fall and winter and made their annual trip to the post in the early spring to trade for supplies, goods and to pay debts. They came in small groups of one or two hunters and on their arrival at the post were presented with presents of ammunition, tobacco and rum with which they proceeded to enjoy themselves, often all night. Trading commenced the next day (Hanna 1973: 127). Larger bands of natives announced their arrival with a discharge of arms which was or was not returned by the post. The Hudson's Bay flag was always hoisted and the chief or leader along with a number of his followers entered the post and speeches and formal exchanges of gifts were made between the factor and the chief (Hanna 1973:127; HBCA, PAM, B. 159/a/12, fo. 7). At times, "a salute of musketry" by the

Indians and the hoisting of the flag followed the concluding of trade (Cummings 1844, May 1). The HBC rewarded successful and faithful Indian hunters by making them chiefs and bestowing the gifts and honours associated with the title. In 1844, Chief Trader Cummings alludes to this practice as being wasteful, expensive and the cause of much envy and jealousy among the Indians and suggests it be discontinued. The furs collected were transported to Swan Lake Post and then on to York Factory.

Throughout the year, the people were employed with the hauling and cutting of firewood, hay, and lumber which was used to build kegs, boats and carts and to repair the buildings (HBCA, PAM, B. 159/a/18, fo. 18). The post was constantly being commissioned to build and provide boats for various posts (Fleming 1940:78).

The blacksmith played an important role in the functioning of the post and in developing relations with the Indians. His jobs were varied and included everything from making boat nails, door and gate hinges, iron pots, carts, bread boards, ploughs and trading axes to repairing iron stones, and guns for the Indians and on "working for scrapers for them" (metal hide scrapers) (HBCA, PAM, B. 159/a/8, fo. 18d; B. 159/a/18, fos. 20, 23d, 30, 55d, 61). Repairs and manufacture of trade articles, such as guns and axes by the blacksmith, aided in maintaining and strengthening native dependency upon and attachment to the post and ensuring their return and trade.

The Indians' growing dependency upon the post was demonstrated in February 1832, when a notice from Governor Simpson to abandon the post was received. The Indians were dismayed, confused and upset at the news as witnessed by their responses:

> ...tell me what is the cause why the Houses are So often changed, we no Sooner become attached to one than we are ordered to be removed to Some other, you cannot complain of Starvation this year, your store is full of Buffalo...
> (HBCA, PAM, B. 159/a/13, fo. 25d).

> ...what have we done that our post is to be thrown away, we never Stole your Horses, but often protected them & returned them when taken by the Que appelle Ind. we brought you rats when there was plenty and now we give you Wolves and few foxes and Lynx Skins, we bring you Provisions every Spring and fall and why Should we be thus abandoned. This is our country and that of our Fathers, we don't like Carlton and Que appelle far less and it is impossible for us to go down to the Swan Lakes, tell the Chief our Sentiments, which we will communicate to him ourselves in the Spring.
> (HBCA, PAM, B. 159/a/13, fo. 27d).

Chief Factor C. Robertson promised to speak to Governor Simpson and no further mention is made in the journals and the post continued to operate until 1856, at which time it was relocated.

The women of the establishment also played an important role in the functioning of the post. These women would mostly be of mixed-blood, Metis, since this group experienced a major population growth from the 1790s to mid 1800s (Brown 1976:68; Van Kirk 1980:110). Few references to women's activities are found in the Pelly Post journals and include tapping for sugar, sewing pemmican bags, smoking dressed leather and soaking leather (HBCA, PAM, B. 159/a/10, fos. 23-23d, B. 159/a/12, fo. 27d). In addition to these activities the women would also have been involved with the making of moccasins, netting snowshoes, preparing pemmican, hunting and needlework (Van Kirk 1980:110). Other chores might include the responsibility for the annual spring cleaning and the planting and harvesting of potatoes. As well as the above activities, the Metis woman could act as an intermediary or liaison between Indian and White without becoming a source of conflict (Van Kirk 1980:111), which would be advantageous for the trade at the post.

The post was encouraged to be as self sufficient as possible and hunting, fishing and farming/gardening were encouraged. Barley, potatoes, turnips and cabbage were grown successfully in the gardens and wheat had been tried in 1833, but failed due to the "backwardness" of the season (HBCA, PAM, B. 159/a/14, fo. 14d, B. 159/a/8, fos. 34d, 35, 35d). At times the gardens had to be guarded from thieving and starving Indians (HBCA, PAM, B. 159/a/18, fo. 10). Fisheries were established at Shoal River, the Porcupine Hills, Duck Bay and Swan River, with whitefish being the principal fish caught. In 1835, the fishery at Porcupine Hills boasted catching 2,000 to 3,000 fish within a ten day period (Todd's Journal 1835, Dec. 10). In the event that one fishery was unsuccessful, the others could be depended upon. A portion of the fish catch went to feed the dogs which were needed to pull the sleds in the winter (Klaus 1961:85). Despite these precautionary measures and practices, the post occasionally experienced shortages of food. They were especially hard hit in the winter of 1831-32, when they had to kill some of the domestic cattle to ration to the people (HBCA, PAM, B. 159/b/1, fo. 1, D. 5/41, fo. 110).

The post was also in charge of manufacturing and supplying salt to the Red River and other areas (HBCA, PAM, D. 4/103, fo. 20d). It was manufactured at Swan River where a salt spring existed (Lamb 1956:34; Klaus 1961:88-89). Hind (1971:45) describes the process of making salt as follows:

> When a spring is found, a well, five feet broad and five feet deep, is excavated, and near to it an evaporating furnace erected. The brine from the wells is ladeled into the kettles, and the salt scooped out as it forms, and allowed to remain for a short time to drain, before it is packed in birch bark toggins for transportation to Red River...

The people did get a reprieve from routine duties on Christmas and New Year's Day. Christmas Day was observed with somber sobriety, with a small ration of rum and a good meal provided, while New Year's Day was more festive with additional rations of rum and a dance which lasted as long as the people could move (Hanna 1973:128).

Two other events which interrupted the normal routine of the post, aside from the small pox epidemic of 1837-38, were the report of a break and entry in 1830, and the fire ore 1843. On November 28, 1830, it was discovered that someone had broken into the trading shop. The person entered through the window and after removing the goods, carefully wedged the window parchment back into the frame with pieces of wood. Due to the expert repair and replacement, the theft was not immediately detected. However, on January 26, the thief, a Metis by the name of Matomy, was finally apprehended and his punishment consisted of working at various jobs at the post until Chief Factor Colin Robertson considered the debt paid (HBCA, PAM, B. 159/a/12, fo. 20). A fire broke out in the winter of 1843 and destroyed the principal part of the post, and "neutralized the increase of Lynx, martens & musquash experienced that year" (HBCA, PAM, A. 12/2, fo. 165). The rebuilding began immediately under the direction of Chief Trader Cuthbert Cummings (Cummings' Journal, 1844).

The routine activities previously discussed were performed by people of various ethnic backgrounds, social classes and sex. The social organization of the HBC was structured along hierarchial lines, the basic division being between the officers and the servants (Van Kirk 1980:9). During the 18th century the servant class was dominated by Orkneymen while chief factors and their subordinate officers were mainly Englishmen (Van Kirk 1980:11). This situation, however, was changing in the late 18th and early 19th century as Britain demanded large numbers of able-bodied men to fight her wars. At the same time the Metis population was increasing, becoming a culturally and socially distinct group (Brown 1976:69; Van Kirk 1980:11). At Fort Pelly 1, most men employed as servants were Metis. In 1828, Chief Factor John Clarke complained that too many Metis were employed as servants and that they either deserted to the competition or to free traders or joined the Indians on the Plains (HBCA, PAM, B. 159/e/3, fo. 1d). Of the 26 men employed in 1828, fifteen were Metis while five were Canadian and six were European (HBCA, PAM, B. 159/e/3, fo. 2d). The complaint was reiterated by George Simpson in 1856. He stated that they were under the necessity of hiring Metis from the Red River Settlement, and who frequently joined the free traders (HBCA, PAM, A. 12/8, fo. 486d).

The number of men employed in the early years of the post's existence ranged from 22 to 29 (HBCA, PAM, B. 159/f/1, fo. 1d, B. 159/f/2, fo. 1d, B. 159/f/3, fo. 1d). Although no records exists for the 30s and 40s, it can be assumed that the numbers of men increased steadily, because in 1856 a total of 64 men, over half being Metis, were employed in the Swan River District.

The above figures do not take into account the women and children present at the post. In fact, no mention is made of women in the very early years of the post's establishment. However, by 1828, their activities are recorded in the post journal (HBCA, PAM, B. 159/a/10, fo. 23d). In 1829, Chief Factor John Clarke mentions that 14 women and 44 children were present at the different establishments in the district (HBCA, PAM, B. 159/e/3, fo. 2d). No exact number is given for any one specific post. The number of women and children also likely increased throughout the 1830s, 40s, and 50s, as the post became a substantial permanent establishment and the number of servants grew.

## 3.7 Old and New Fort Pelly

During 1856-57, Fort Pelly 1 was moved to a new site approximately 0.4 km southeast of its present location, and this post is referred to as Fort Pelly 2 (it continued in existence until 1912). The move was made because of occasional flooding by the Assiniboine River, which often rose high enough to fill the cellars and cause some inconvenience and displeasure, though not submerging the entire post (Klaus 1961:88; Morton 1942:14). The old post, however, continued in use for a number of years after the move. On October 19, 1857, Palliser (Spry 1968:164) reports that:

> An old post was still in existence in a Swamp below, which was inconvenient on account of its low damp situation & consequently abandoned.

The 1858 journal records that men were whitewashing the houses at the old Fort, and that men were raking about the old Fort and that one man was kept occupied cutting firewood to keep the fires burning in the old post (HBCA, PAM, B. 159/a/19). The Earl of Southesk (1875:322-23) who visited the post during his travels in 1859, mentions that:

> In the immediate foreground stand the remains of the old Fort, partly occupied by the servants and partly converted into cattle-houses...
>
> There was morning service as usual at the old Fort, conducted by Rev. Mr. Settee _____.

## CHAPTER FOUR

## FEATURE DESCRIPTION AND POST CONSTRUCTION

No maps or sketches of the layout of Fort Pelly 1 have been found. Evidence for the ground plan, specific structures and the building or construction phases have all been derived from a correlation of archaeological evidence and historic sources. Archaeological investigations revealed nine structures which have been tentatively identified on the basis of the artifacts recovered and historic documentation. These included: a trading store; warehouse or storehouse; factor's house; men's house; kitchen; stable; a blacksmith forge and a tempering trough; and palisades and bastions (Fig. 8). Journal entries provided the only source of historic material containing references pertaining to specific structures and construction phases.

Structures encountered at Fort Pelly 1 are numbered and named for purposes of reference and description (Table 2, Fig. 8). Secondary features such as fireplaces and cellars associated with main structures are all included with the respective structure. Measurements and units were originally recorded in feet and inches, but the data is presented here in metric units. Symbols used throughout for the figures are presented in the legend in Table 3.

### 4.1 Feature 1: Palisades and Bastions

Having chosen the site for the post, in September of 1824, Chief Trader Allan McDonell had the men "cutting Palisades or Pickets for the Fort digging a trench to form a square of hundred and twenty feet..." (HBCA, PAM, B. 159/a/8, fo. 10). He continues to state that "Most of the men were employed pointing, boring and preparing the pickets, making ribbands and treenails..." (HBCA, PAM, B. 159/a/9, fo. 10). In 1971, sections of the original north, south and east palisades were located (North - square 33L1; South - squares 24L12, 28L12, 28L13; East - squares 24C, 23L7). The lengths of the palisades were determined either through total excavation or partial excavation of entire squares and extrapolation. The palisade trenches were clearly evident throughout the squares, however, remains within the individual trenches varied. The trenches ranged in width from 30 to 60 cm with the depth averaging around 60 cm. Trench fill consisted of a mixture of light and dark sand.

In the south and east palisade trenches there were no post remains or post moulds such as would be found if the posts had decayed (Figs. 8, 9), suggesting that the posts had been removed. Colin Robertson's journal entry of 1831 "...Begun to Pull down the old Stockade at the

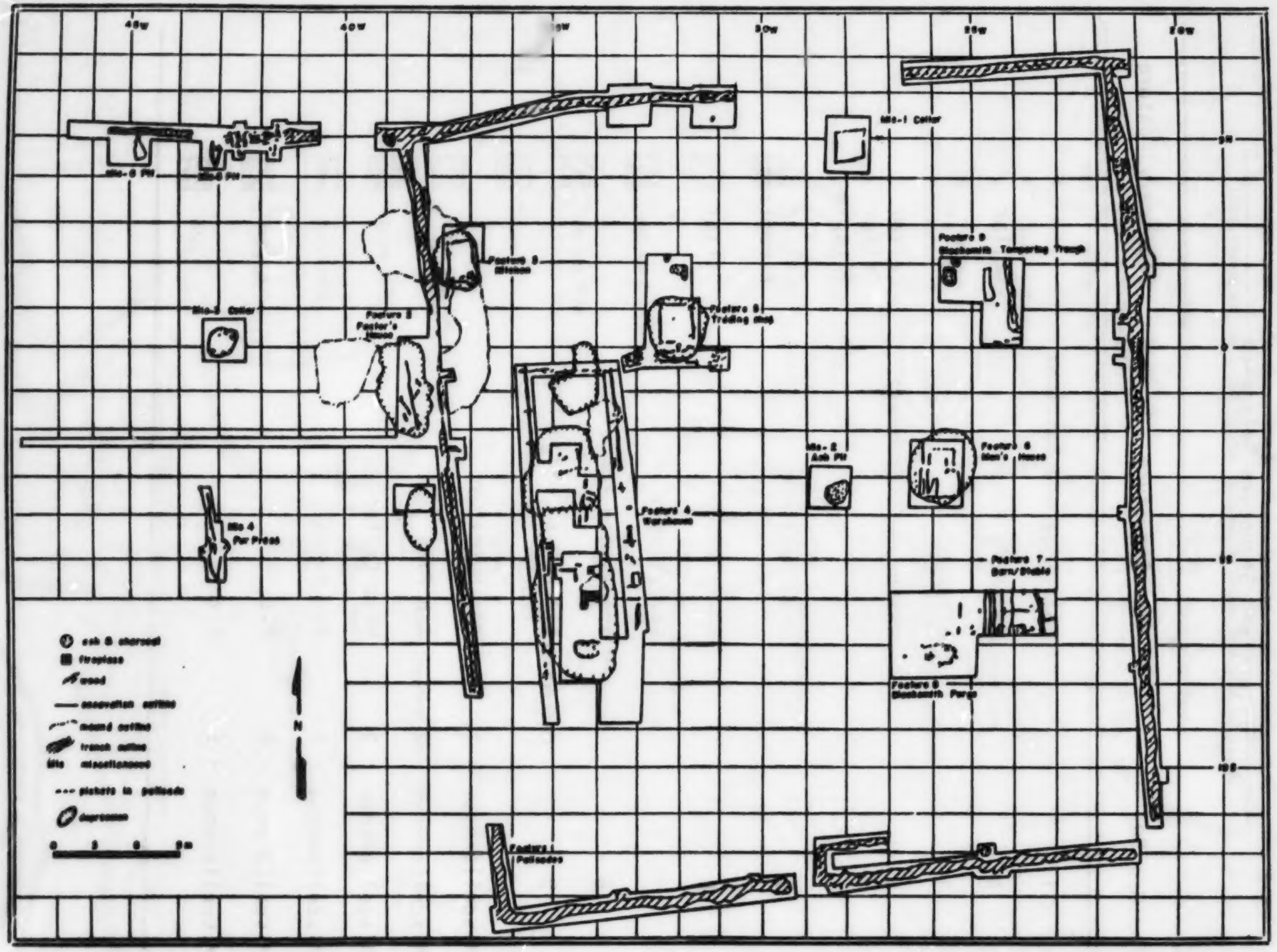

45W
40W
30W
25W
20W
5N
0
5S
10S
Misc-6 Pit
Misc-5 Pit
Misc-3 Cellar
Feature 2
Factor's
House
Feature 3
Kitchen
Feature 5
Trading Shop
Feature 4
Warehouse
Misc 4
Fur Press
Misc-1 Cellar
Feature 9
Blacksmith Tempering Trough
Misc-2
Ash Pit
Feature 6
Men's House
Feature 7
Barn/Stable
Feature 8
Blacksmith Forge
Feature 1
Palisades
ash & charcoal
fireplace
wood
excavation outline
mound outline
trench outline
misc miscellaneous
pickets in palisade
depression
N

Figure. 8 Site Plan of Fort Pelly 1.

## TABLE 2

### Feature and Structure Reference

| Feature No. | Main Structure | Secondary Feature |
|---|---|---|
| 1 | Palisades and Bastions | |
| 2 | Factor's House | Cellar |
| 3 | Kitchen | Cellar |
| 4 | Warehouse/Storehouse | Cellar<br>Cellar<br>Fireplace |
| 5 | Trading Store | Cellar<br>Fireplace |
| 6 | Men's House | Cellar |
| 7 | Barn/Stable | |
| 8 | Blacksmith Forge | |
| 9 | Blacksmith Tempering Trough | |
| Miscellaneous - 1 | North Cellar | |
| Miscellaneous - 2 | Ash Pits | |
| Miscellaneous - 3 | West Cellar | |
| Miscellaneous - 4 | Fur Press | |
| Miscellaneous - 5 | Pit | |
| Miscellaneous - 6 | Pit | |

TABLE 3

Legend

This legend applies to all figures throughout, unless otherwise indicated.

| | |
|---|---|
| — | Exacavation Outline |
| -·-· | Slight Depression Outline |
| --- | Soil Surface Outline |
| — | Trench Outline |
| B | Bone |
| P | Potter's Hole |
| R | Rodent Hole |
| S | Shoe Sole |
| X | Stone |
| T | Nail |
| Balk | Balk |
| Caved In | Caved In |
| ▦ | Apron |
| ░ | Ash |
| ▦ | Ash and Charcoal |
| ▨ | Ash and Clay |
| ▤ | Bark |
| ▩ | Black Soil and Yellow Sand Mixed |
| ▥ | Brown Soil |
| ▭ | Burnt Wood |
| ▩ | Charcoal |
| ▩ | Clay |
| ▩ | Dark Brown Sand |
| ░ | Disturbed Original Soil |
| ▧ | Fireplace |
| ▦ | Light Brown Sand |
| ▦ | Mixed Light and Dark Brown Sand |
| ▦ | Moss |
| ▦ | Organic Material |
| ▣ or ▢ | Post |
| ▩ | Red Burnt Sand |
| ▤ | Round Log |
| ▦ | Sand and Ash Mixed |
| ▦ | Subsoil |
| ▦ | Water Deposited Clay |
| ▤ or ■ | Wood |
| ▨ | Yellow/Grey Soil With Charcoal |

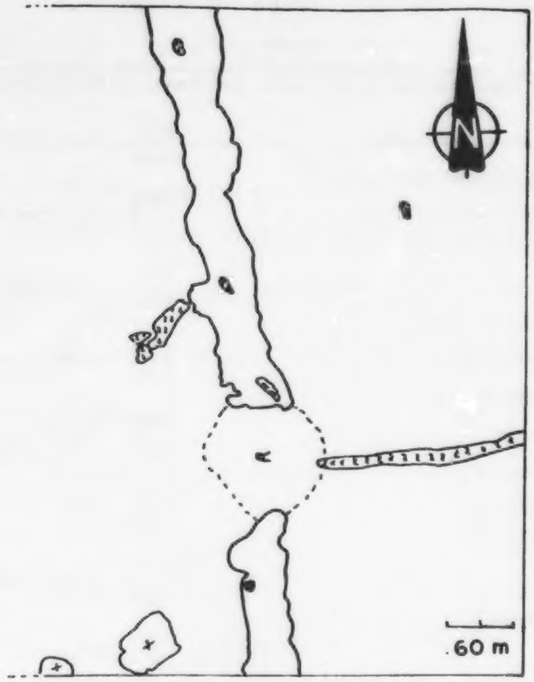


Figure 9. Original East Palisade (Sq. 23L7).

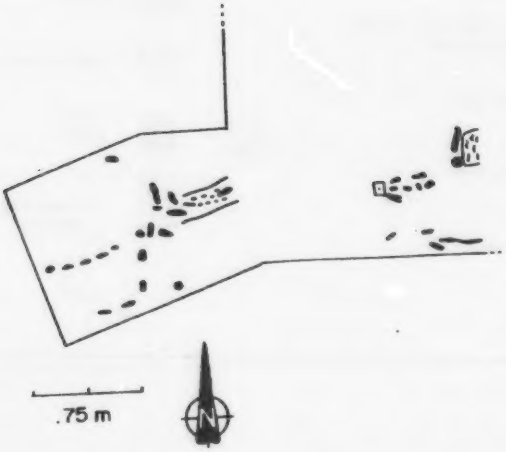


Figure 10. Remains of original north palisade.

Fort -" (HBCA, PAM, B. 159/a/13, fo. 3) supports this hypothesis. Several pieces of wood, probably the ribbands to which the pickets were attached were recovered from the south palisade (Sq. 28L13).

Remains in the north palisade trench consisted of a number of pickets ranging from 10 to 15 cm in length and a square post (Fig. 10), 15 cm in diameter, uncovered 0.6 to 1.8 m west of the store (Feature 5). Due to the subsequent construction and building of the trading store, warehouse, and factor's house in the area, much of the original north palisade has been disturbed and obscured, accounting for the sparseness and condition of the remains. The distances between the north and south palisades measure 37 to 38.5 m (120 to 125 ft.), which correspond closely to Allan McDonell's 1824 requirements.

The locations of two bastions were identified in the south palisade (Sq. 28L13) and the east palisade (Sq. 24℄). In the south palisade, the bastion appears to have been situated at mid-point (Fig. 8). Here (Sq. 28L13) the trench forms a corner and turns south, with pieces of wood oriented north-south and rocks present throughout (Fig. 11). This would appear to indicate a post-on-sill construction (Fig. 12) with rocks placed in the trench for support. The trench extends south approximately 2.1 m ending at the later south palisade trench and does not continue beyond (Fig. 11).

The east palisade in Sq. 24℄ forms a corner and turns east (Fig. 8). The trench is quite narrow, 22.5 cm, with no remains of posts or post moulds. A small trench (Fig. 13) is evident on the west side of the palisade, which may have contained a support post or corner post of the bastion, although no remains of one are present. This would suggest that the bastion was either moved or taken apart, as the east palisade trench, containing pieces of wood, continues north from this point in Sq. 24R1 (Fig. 8). In 1828, Chief Factor John Clarke removed the northwest side of the stockade and "removed the East Corner Bastian in a line with the Stockade..." (HBCA, PAM, B. 159/a/10, fo. 10). This would account for the lack of remains and the continuation of the east palisade.

### 4.1.1 Later Palisades and Bastions

The palisade trenches for the north, south, east and west palisades were clearly evident with remains varying within the individual trenches. The trenches ranged in width from 30 to 135 cm with an average depth of 30 cm. In the north, east and west palisade trenches picket remains similar to ones found at Fort Carlton were found (Ranere 1967: 24). These were crescent shaped, formed by sawing round logs in half lengthwise and set side by side to form a wall with the flat smooth surface facing out and the rounded surface facing into the post (Fig. 14). The as-found length of the pickets ranged between 10 to 12 cm with larger round posts interspersed throughout at random intervals for support.

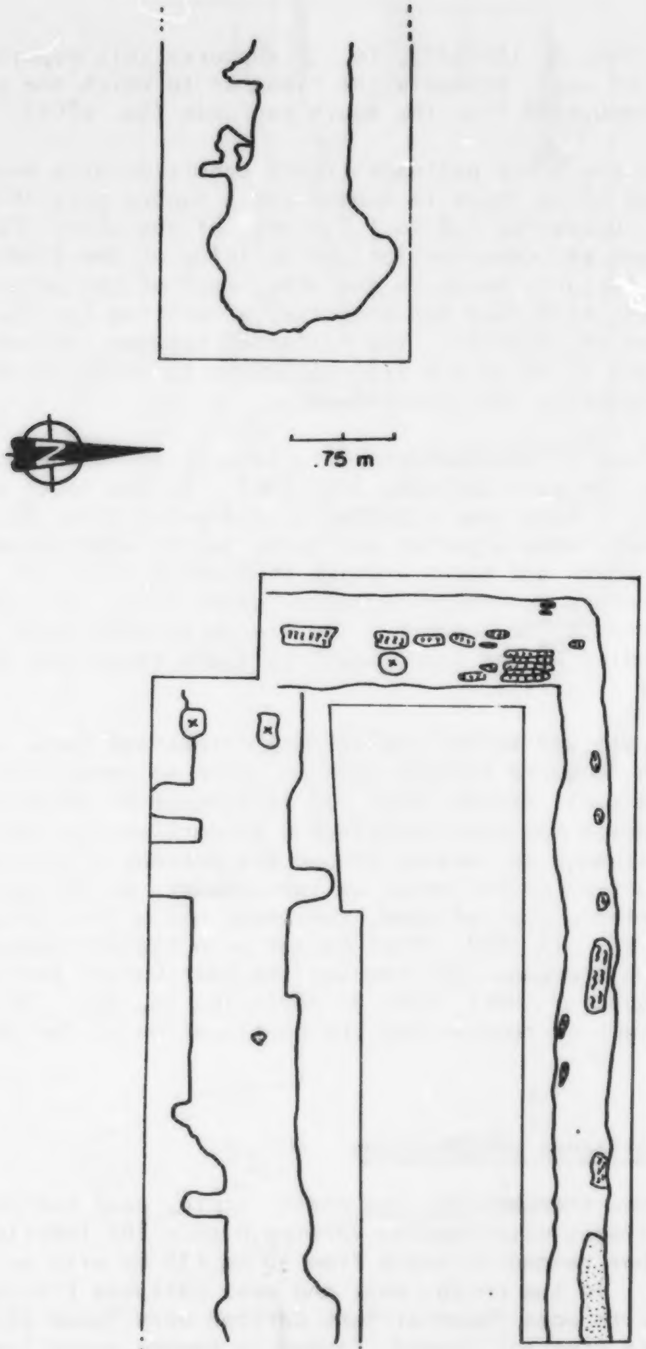


Figure 11. Bastion area (Sq. 28L13) of original and later south palisades.

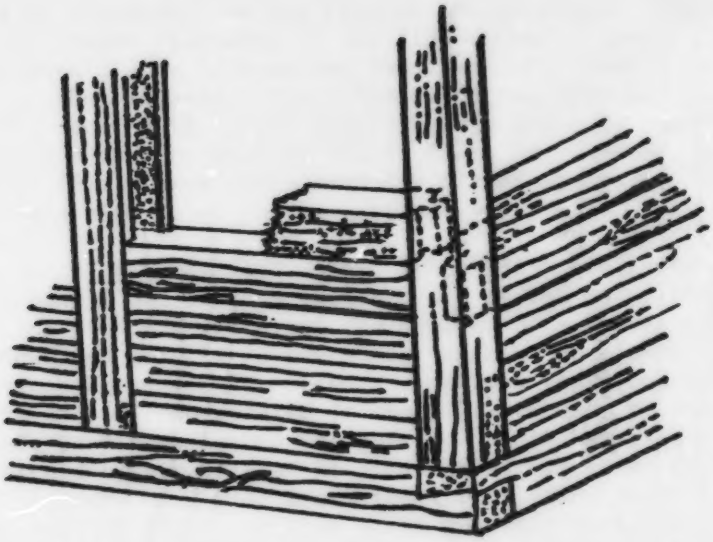


Figure 12. Post-on-sill construction (after Barbeau 1945:10).

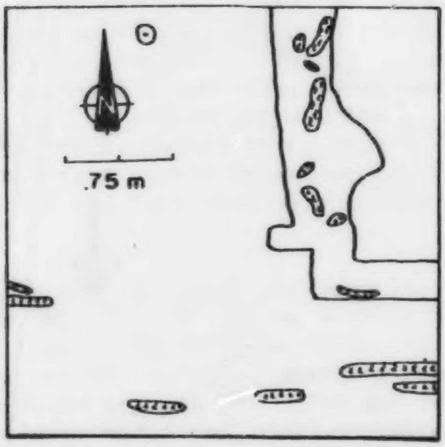


Figure 13. Original Northeast Bastion (Sq. 24t).

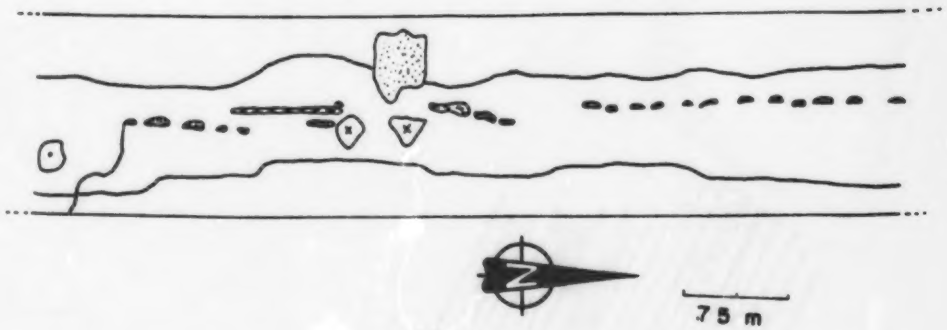


Figure 14. Picket and support post remains in later east palisade.

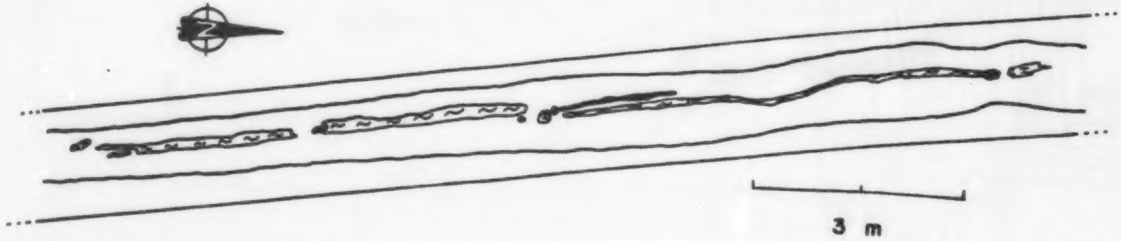


Figure 15. Ribbands and support posts in later west palisade.

Lengthwise fragmentary pieces of wood were found forming the ribbands, and in all instances were located on the outside of the palisade, for purposes of attachment to the flat or smooth side of the pickets (Fig. 14). A ribband recovered in Sq. 31R5 showed evidence of bored holes approximately 2 cm in diameter for tree-nails used in attaching the pickets to the ribbands. The ribbands in the west palisade were more complete, ranging in length from 2.4 to 6 m and in width from 7.5 to 22.5 cm with a support post or posts, 20 cm in diameter, between the ribbands (Fig. 15). Large rocks randomly placed alongside the pickets for support were also found in the east palisade.

In the north palisade (Sqs. 31R5, 34R5, 33R5) additional horizontal logs (ribbands) and pickets appear south of the main line in the same trench and probably represent the remains of a former stockade of 1828 taken down and rebuilt in the same trench. The pickets in this earlier palisade are unevenly spaced, suggesting that good posts were probably re-used and incorporated in the newly rebuilt palisade. The north palisade continues beyond the junction of the north and west palisade (Fig. 8) ending abruptly at no apparent structure or feature. Perhaps it was intended as a wind break for the building built in 1828 and the new boat yard in 1831. In this north palisade extension exposed wood remains (Sqs. 42R4, 43R4, 44R4) (Fig. 16) reveal a gate, possibly the entrance to the boat yard as Chief Factor Colin Robertson notes that "...Wilson Making Gates for the Boat yard door..." (HBCA, PAM, B. 159/a/13, fo. 4) or a section of the palisade which toppled over and was left. A fire pit is evident in Sq. 45R4 near the palisade wall. Burnt logs were found in the pit along with concentrations of ash and probably represent an area used for burning rubbish.

Approximately half way along the east stockade (Sq. 2Ⱡ, 21R1, 21R2) (Fig. 8) a 4.3 m interval devoid of pickets reveals the location of a gate. A 20 cm square support post exists at the south end with no similar post present in the north end, although there is evidence of large pieces of wood (Fig. 17). Approximately 150 cm before the termination of the pickets, the palisade trench also turns west and continues for 92 cm and ends (Fig. 17). Pickets are present in the trench and the structure probably provided a backstop or rest for the gate. In 1831, after the post was enlarged, Colin Robertson records that "...Wilson finishing the Gates for the East side of the fort" (HBCA, PAM, B. 159/a/13, fo. 4).

Disruption of the west palisade and scarcity of remains in Sqs. 37L3, 37L2, 37L1 and 38Ⱡ (Fig. 8) may be attributed to the presence of a structure probably the factor's house, built in 1828, for which there is evidence (i.e., a cellar) in this immediate area. It appears that the west palisade abutted against the north and south walls of this building, as it continues north and south to join these palisades. A test trench extending 45 m west from Feature 2 was excavated for purposes of intersecting an additional west palisade. No evidence for this was found. Also, excavation of the westward extension of the north palisade revealed no corner joining another west palisade corroborating the hypothesis that no west palisade was built beyond the new building.

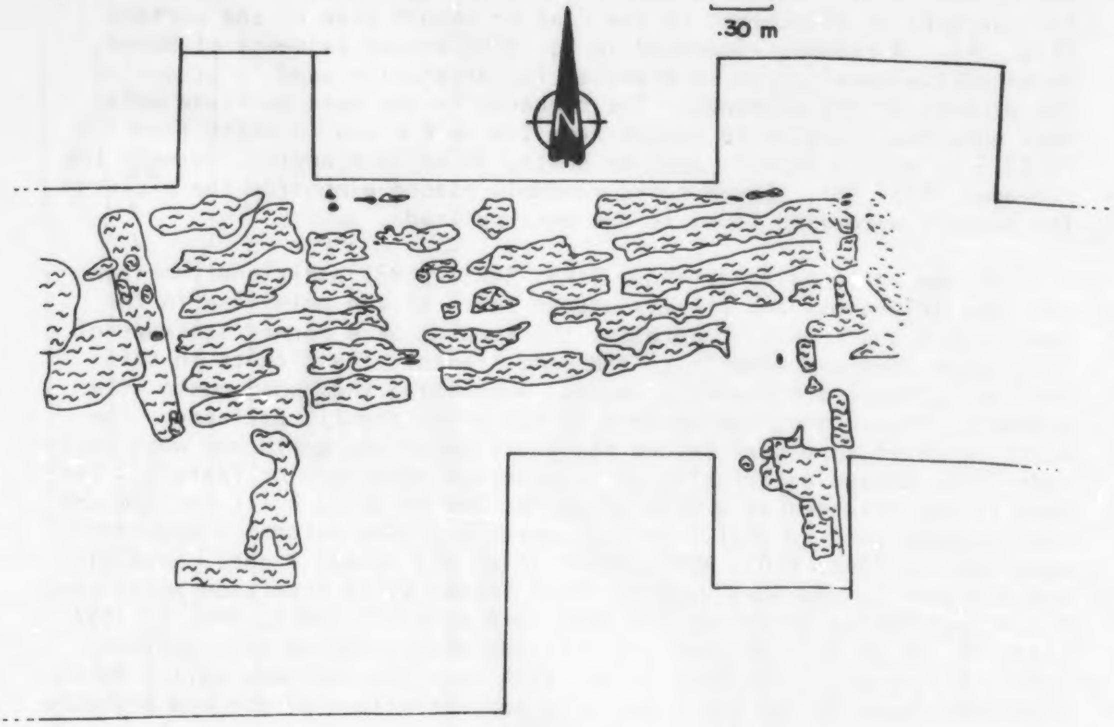


Figure 16. Exposed wood in extended north palisade.

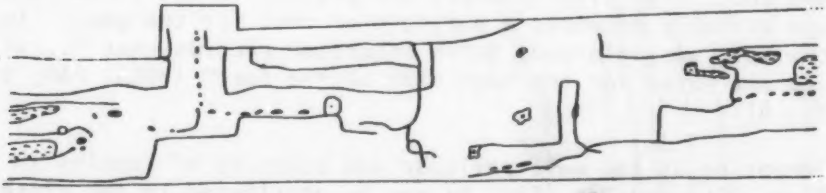


Figure 17. Gate area in later east palisade.

Very few remains, consisting of a few posts and fragments of wood, were found in the south palisade trench. Small trenches (Fig. 8), where support posts were placed, were found along the stockade at random intervals, but no other remains were present. Possibly the posts were removed for the construction of the new post in 1856.

The probable locations of five bastions were noted -- three at corners (NW, NE & SE) and two central ones in the south and east palisade. Evidence for the NW bastion is not conclusive. In Sqs. 38R4 and 39R4, approximately 13.8 m north of Feature 2, the north and west palisades meet forming a corner (Fig. 8). Remains are sparse and consist of fragments of wood and a large post 20 cm in diameter (Fig. 18). Provided a bastion did exist here, it is not known if it, along with this section of the west palisade, remained when the north palisade was extended 20 m to the west in 1831.

Indications of the NE bastion is found in Sq. 21R6 (Fig. 19). The east palisade does not meet the north, but turns east and continues approximately 90 cm (Fig. 19). The trench is narrow, measuring 37.5 cm, and remains consist of a few fragments of wood.

In the area of the SE bastion, the south and east palisades do not meet to form a corner (Fig. 20). Both trenches end with a large post, 20 to 25 cm in diameter, abutting most probably against the corner bastion. The distance between the two palisades measures approximately 2.1 m. No trench or wood remains of the bastion were present. A post-on-sill construction may have been employed for the bastion, with the sills placed on the surface rather than in a trench. This structure may have been removed or taken apart for use at the new post in 1856. Chief Factor Colin Robertson, in 1831, records that wood was being squared for the bastions (HBCA, PAM, B. 159/a/13, fo. 3).

A blockhouse and possible gate existed (Fig. 8) approximately midway along the south palisade (Sqs. 28L13, 29L13 & 29L14) and in the immediate vicinity of the structure identified in the original south palisade. In Sqs. 29L13 and 29L14, the palisade trench ended and was quite wide measuring 120 cm; however, no remains of posts or wood were present. In Sq. 28L13, rocks and small trenches on either side of the main trench for support posts were found. On Fig. 21, the blockhouse is shown not as a solid structure from the ground up, but consisting of a wooden block structure situated atop a gateway, providing entrance to the post. Archaeologically, there is no evidence suggesting a complete structure from the ground up. It is also possible that a similar structure existed over the east gateway. It is possible that the blockhouse of the original south stockade was not removed, but that the palisade was extended to its outer wall. Further support for this is the lack of remains beyond the later palisade.

Evidence for a bastion at the southwest corner was lacking. The south and west palisades joined forming a corner with a small trench extending 30 cm west (Fig. 8), probably for a support post rather than a bastion.

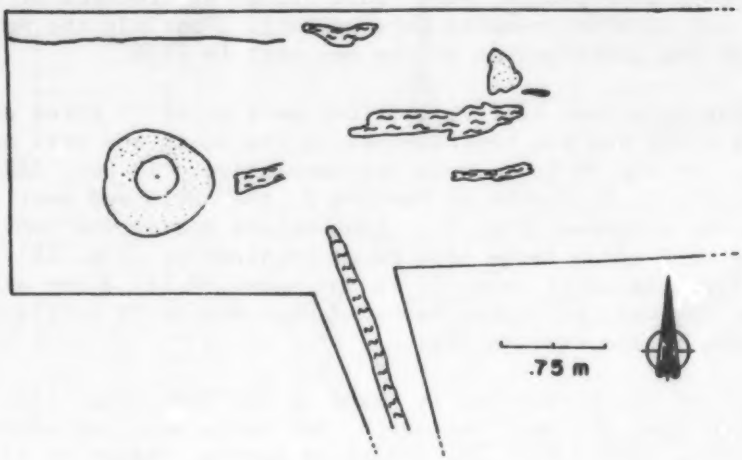


Figure 18. Northwest corner of later palisade.

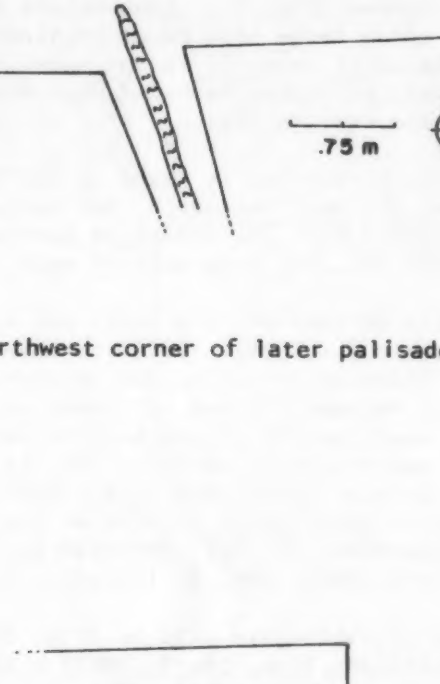


Figure 19. Northeast bastion area (Sq. 21R6) of later east and north palisades.

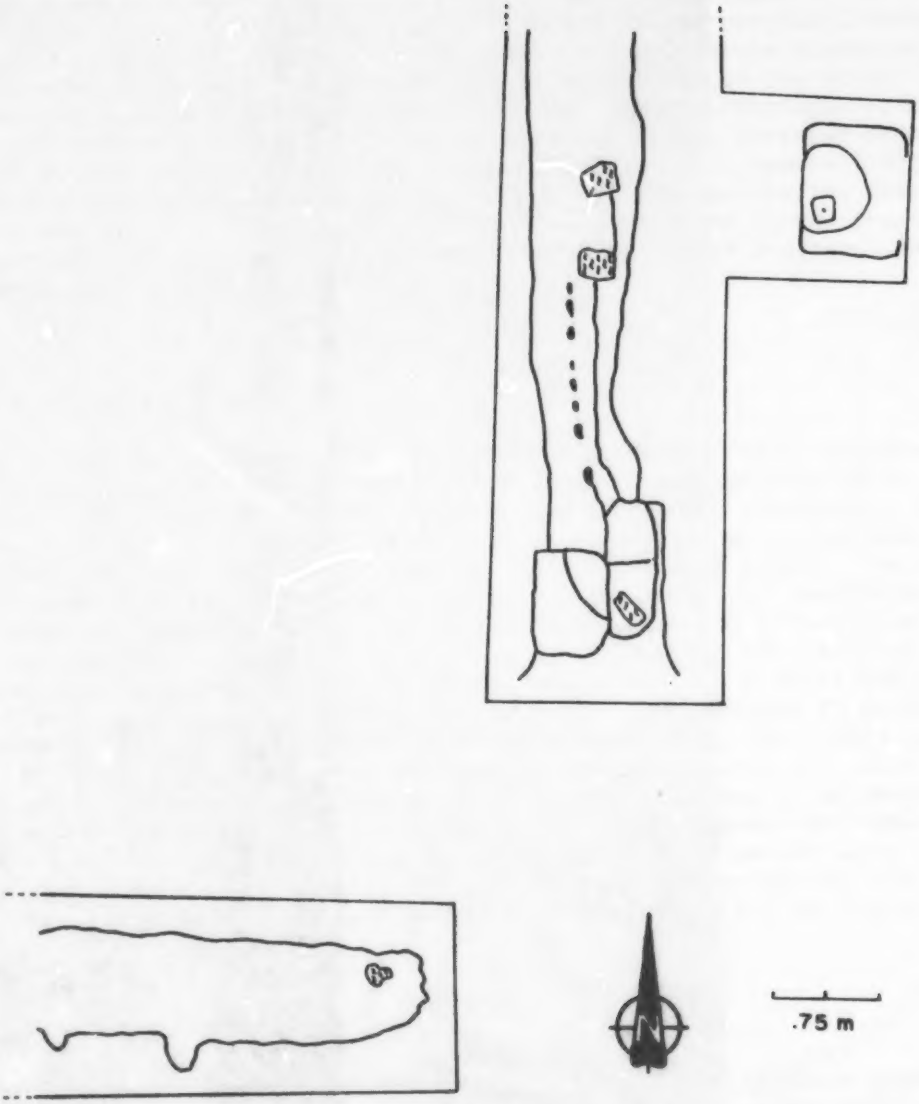


Figure 20. Southeast bastion area of later east and south palisades.

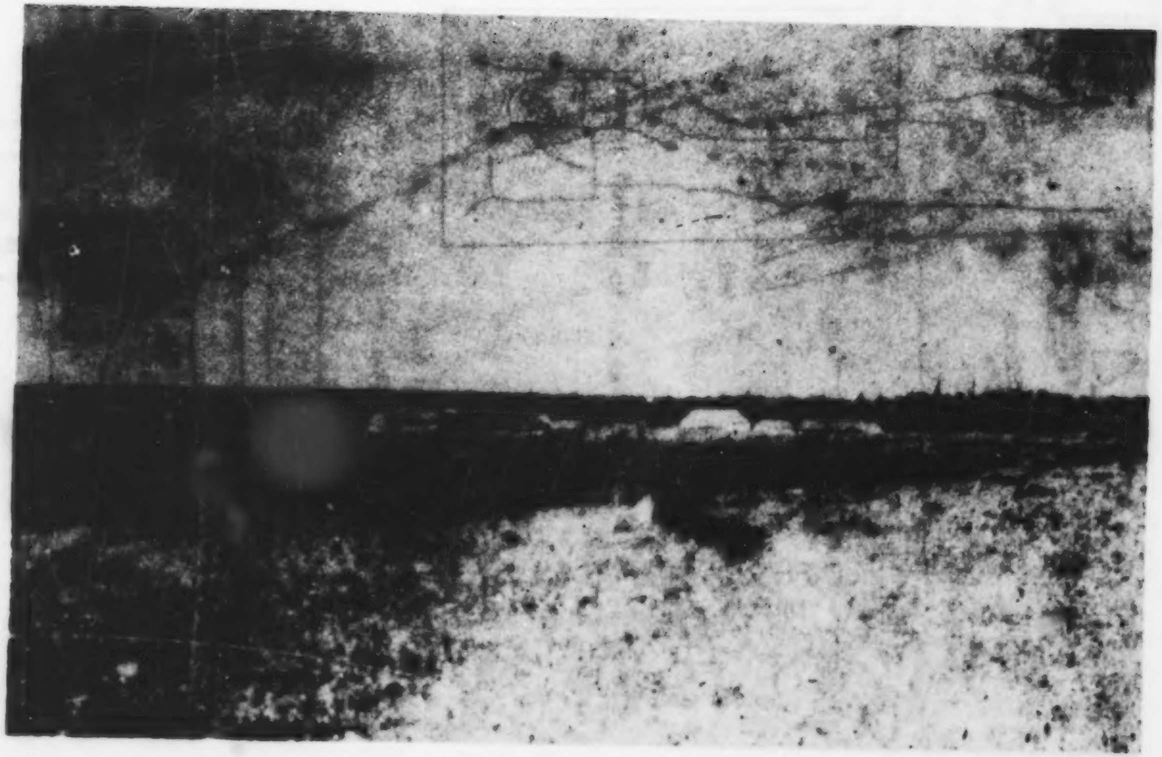


Figure 21. Fort Pelly (photo taken by H.L. Hime 1858, Public Archives of Canada C-4580).

## Palisades: General

The fill throughout the later trench features was a mixture of light and dark sand with some clay in a few places. Ash, probably from the fire of 1843 was encountered in all of the palisade trenches. Debris, especially faunal material, was a common feature scattered throughout the trenches, particularly on the inside of the picket line. Bone may have been used as trench fill, or simply thrown against the inside of the palisade. This was a common practice, attested at many HBC and NWC posts such as Fort Carlton (HBC) and Fort George (NWC). In one section of the later north palisade, two moose skulls, positioned vertically, with the antlers touching were found in the trench. Bark also occurred in the trenches of the later north and south palisade, again possibly as fill.

## 4.2 Feature 2: Factor's House

Feature 2, because of its location and the artifacts recovered there, is presumed to represent the factor's house constructed in 1828. John Clarke removed the "N.W. side of the Stockade...preporatory to erecting Two new buildings absolutely necessary say an Indian Shop, House and Stable..." (HBCA, PAM, B. 159/a/10, fos. 7 & 9d). The east foundation of the structure, constituting the only wall foundation found, was laid in the palisade trench from which the pickets had been removed. Horizontal logs, 3.6 m long and 15 to 22.5 cm wide, ran east-west and were positioned on sleepers, which were 5.1 m apart and ran at right angles to the main logs. Both sleepers measured 90 cm by 30 cm (Fig. 22). Trenches were excavated in Sqs. 39L2, 39L3, 40L3 and 41L3 in order to locate the west foundation but no wall or trench was found. The length and width of the factor's house may be estimated from the measurements and location of the cellar depression within and the mounds in the immediate area, assuming that the mounds were situated outside of the building (Fig. 8). Using this criterion, the structure would measure between 9 and 12 m in length and 4.5 to 5 m in width.

### 4.2.1 Cellar

The cellar depression in the area of the factor's house measured 5.9 m in length and 3.6 m in width, with the actual cellar being rectangular in shape and measuring 6 m by 1.5 m by 1.5 m. The cellar was completely excavated in order to reveal its construction and dimensions. The cellar had been dug into sandy soil with the bottom of the cellar consisting of a mixture of clay and sand. The excavated cellar fill was probably thrown east and west of the structure where small mounds are present (Fig. 8). The mounds may also represent earth piled around the outside of the structure for warmth (pers. comm., Ian Dyck, 1980). The clay and sand mixture was covered by a layer of wood chips and bark

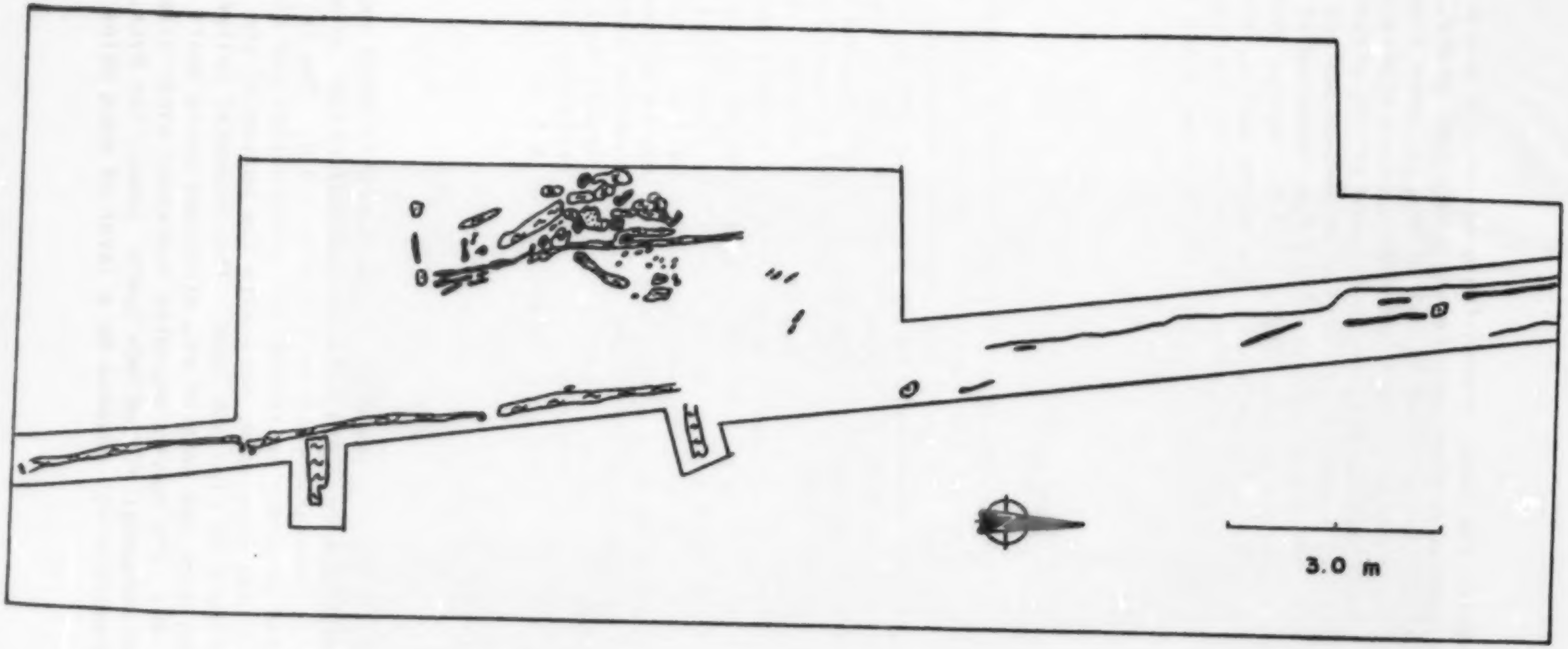


Figure 22. Factor's house and later west palisade area.

forming the floor. Much of this wood and bark had decomposed to a powdery consistency. In the central part of the cellar, wooden plank remains and rocks from the fireplace were found (Fig. 23). John Clarke's journal states that Brissett built a chimney in the Master's House (HBCA, PAM, B. 159/a/12, fo. 3d). Areas of ash and charcoal were found throughout. The sides of the cellar were cribbed with round logs 10 to 15 cm in diameter (Fig. 24). Many of the cribbing logs had narrow metal bands of strap iron nailed around the extreme ends to prevent splitting, which precluded the possibility of using the tongue and groove method of corner construction. The corner was probably constructed with the cribbing logs being butted and toe-nailed (Fig. 25) against round upright corner posts.

## 4.3 Feature 3: Kitchen and Cellar

The kitchen or feature 3 was located immediately to the northeast of the factor's house (Fig. 8). John Clarke mentions that a new kitchen was built in 1831 (HBCA, PAM, B. 159/a/13, fo. 5d). Prior to 1831, Allan McDonell's journal of 1824 states that a small kitchen was built (HBCA, PAM, B. 159/a/9, fo. 12d) and in 1830, John Clarke records that an upper floor was added to the "Cook Room" (HBCA, PAM, B. 159/a/12, fo. 4d). However, this early kitchen was not located during excavation. The excavated feature, designated the kitchen because of the large amounts of culinary items recovered, most likely represents the location of the kitchen referred to in the 1831 journal. The size of this structure is difficult to estimate as no foundations were found. The west wall may have been set into the west palisade trench (Fig. 8) after this section was removed in 1828, but remains at this particular area in the trench (Sqs. 38R1 & 38R2) are greatly disturbed and lacking (Fig. 8). Using the location of the cellar and mounds and assuming the west wall was set into the west palisade trench, the dimensions of 4.6 to 6 m by 3.6 to 4.5 m may be realistic.

### 4.3.1 Cellar

The cellar depression, which measured 3.9 m by 3 m, was completely excavated revealing a cellar rectangular in shape, measuring 2.4 m by 1.8 m by 1.5 m, located in the centre of the kitchen. The cellar had been dug into mixed light sand.

Four walls of the cellar were outlined exposing the cribbing (Fig. 8). The round cribbing logs ranged in length from 1.8 to 2.4 m, and in diameter from 10 to 15 cm, and were horizontally laid on one another and attached by the tongue and groove method to upright square corner posts averaging 15 cm in width (Fig. 26). The northern half of the east wall had slumped and rodent disturbances were extensive throughout the cellar walls. Near the base of the west cellar wall rocks were

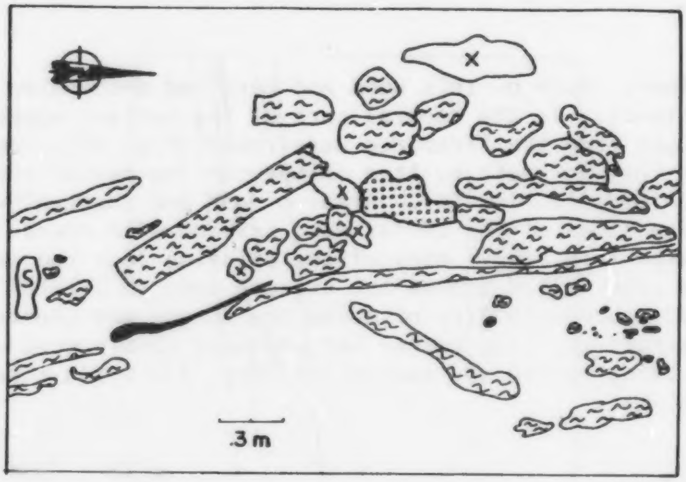


Figure 23. Remains in Feature 2.

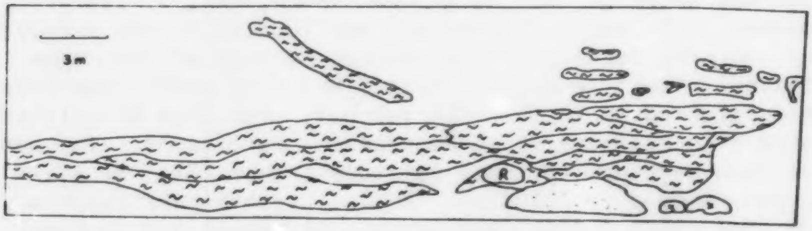


Figure 24. Cribbing of cellar wall in Feature 2.

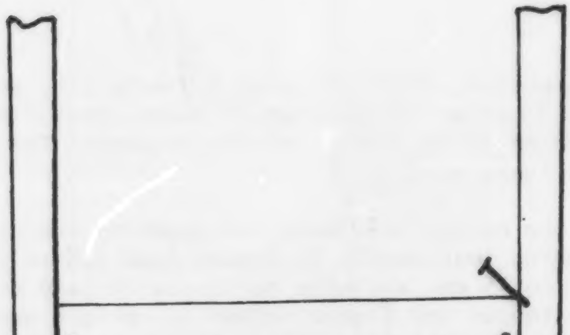


Figure 25. Butted and toe-nailed construction.

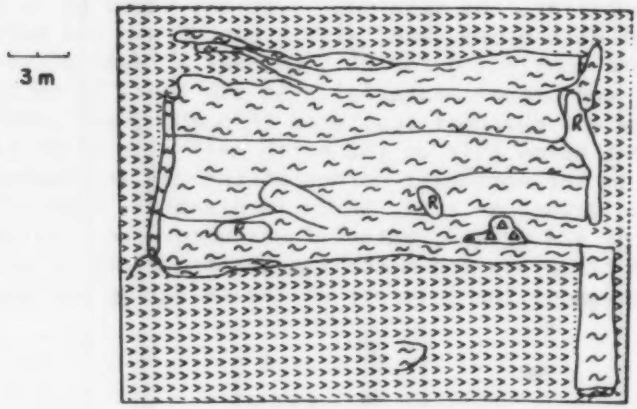


Figure 26. Cribbing of south cellar wall, kitchen.

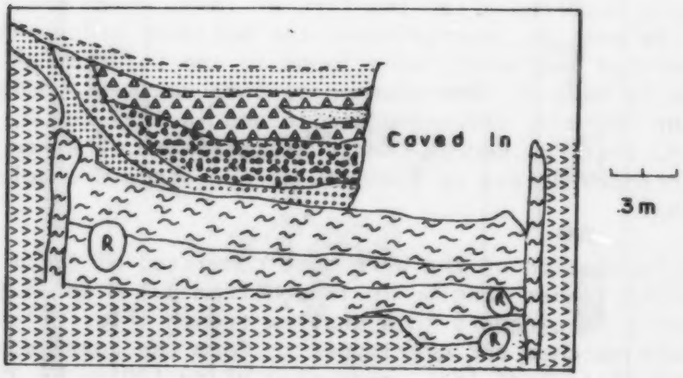

Caved in
R
A
R
3m

Figure 27. Profile of north cellar wall, kitchen.

placed on the floor against the wall, possibly for support. The floor of the cellar consisted of a layer of light sand overlying darker sand and did not appear to have been covered with bark or wood. In the interior part of the cellar, the uppermost section, 42 to 60 cm below datum, consisted of dark brown sand, with areas of ash and bark. Immediately below, and continuing for 22.5 cm, was a layer of very dark sand with charcoal and organic material. An ash lens, 75 cm thick, with chinking, bone and charcoal scattered throughout was underneath. Cribbing was evident below this on the north wall with light sand underneath (Fig. 27). In the northeast corner of the cellar, approximately 120 to 165 cm below datum, an area, 90 cm in diameter, consisting of moss, sawdust, chips and organic material was uncovered. Large rocks, from the collapsed fireplace and miscellaneous fragments of wood, were also scattered throughout the interior of the cellar at various depths.

### 4.4 Feature 4: Warehouse, Cellars, Fireplace

Feature 4, designated as the warehouse or storehouse, was the largest structure constructed at the post. It was situated 6.2 m east of the factor's house and 3.4 m southwest of the trading store (Fig. 8). The foundation for three of the sides was exposed and the cellars and fireplace within were completely excavated. The warehouse was rectangular, measuring 22.5 m by 7.2 m (Fig. 28). The length could exceed 22.5 m as no south wall could be located or ascertained. In the early journals a store, which also contained a partitioned room for the trading shop is recorded as being "40 ft x 20 ft" (HBCA, PAM, B. 159/a/9, fo. 11). No records exist of it being extended to the dimensions of this feature and the construction of this larger warehouse or "Stores" most likely occurred after the fire of 1843, which destroyed a greater part of the post and necessitated the building of new houses. Large logs, scorched and burnt, were found in the interior of the building. Reference is made in 1844 (Cummings) that men were employed cutting timber for "byres", store and stable and in 1853 (HBCA, PAM, B. 159/a/18, fo. 4) that "...George Donald at the frame of a new store...". Both references attest to this new larger structure being constructed after 1843.

The foundation of the warehouse consisted of 30 cm squared tamarack (larch) timber ranging in length from 3.1 m to 18.5 m, placed horizontally on sleepers in a shallow trench (Fig. 28). The ends were square notched and overlapped to form the corners. The sleepers consisting of squared logs, measuring 92 to 120 cm by 30 cm, ran at right angles to the main logs and were placed at 6 m intervals, along the east and west walls. In one place on the west wall, two sleepers were placed 60 cm apart, indicating the probable location of a doorway. Post-on-sill construction, a common HBC building technique, was employed as evidenced from the various depressed areas along the foundation log, where uprights had been butted and toe-nailed.

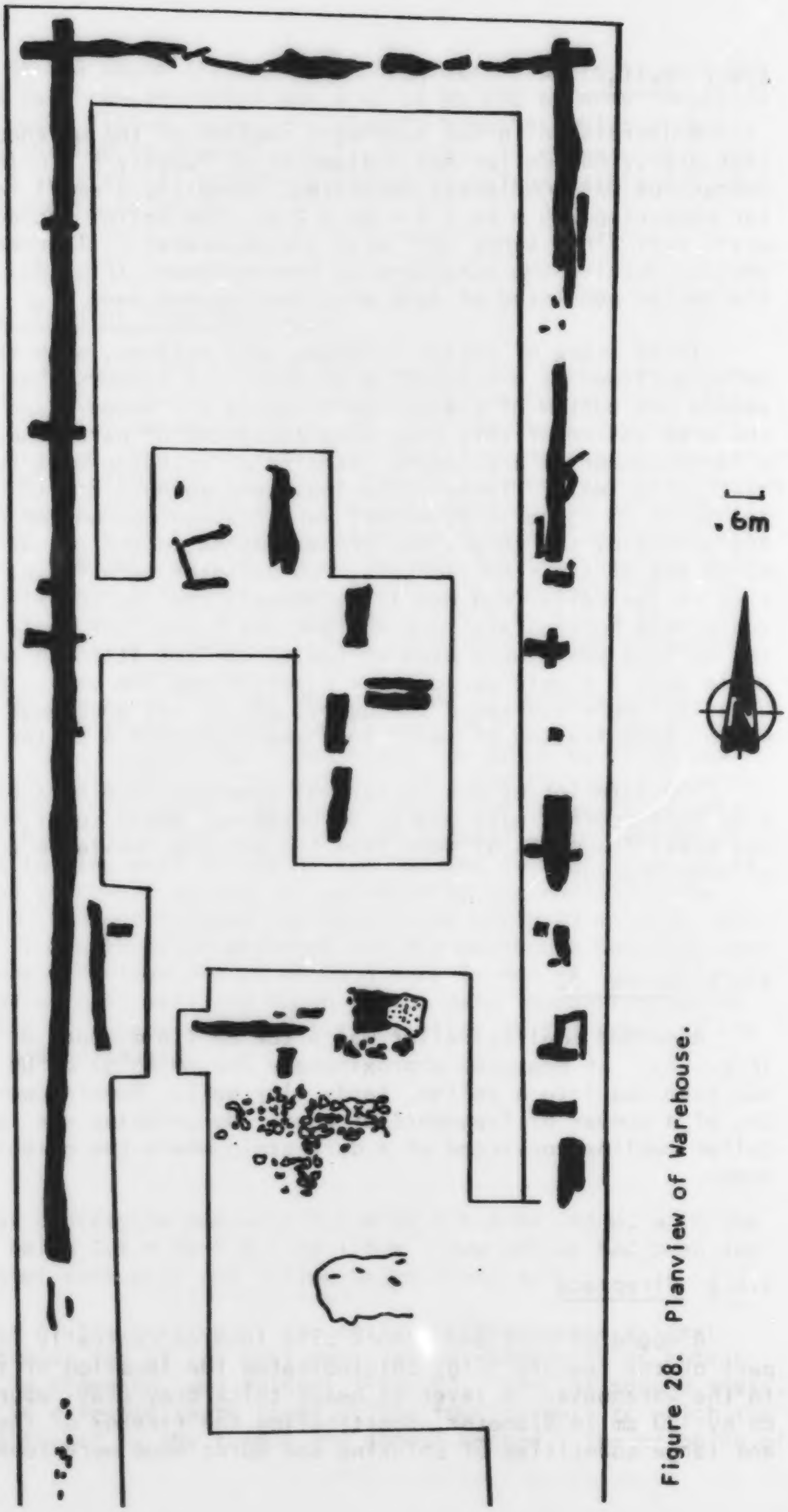


Figure 28. Planview of Warehouse.

### 4.4.1 Cellar

A depression in the northwest section of the warehouse indicates that a previous cellar had a diameter of roughly 5.4 m (Fig. 28). This depression was completely excavated, revealing a small rectangular cellar measuring 2.4 m by 1.8 m by 1.2 m. The cellar was dug into a dark gray, very fine, sandy soil with the excavated fill probably being deposited outside the structure to the northeast (Fig. 8). The floor of the cellar consisted of dark gray hard packed sand.

Three sides of cellar cribbing were evident, with the north wall being outlined by a thin strip of clay. It appears that clay was used around the bottom of the cellar cribbing for support and stability as the area inside of this clay line consisted of pure sand, and yielded a large number of artifacts. Remains of cribbing were found on the east cellar wall. Three round logs, averaging 1.8 m to 2.5 m in length and 10 cm to 15 cm in diameter, were stacked one on top of the other and joined by the tongue and groove method to the corner post. At the north end of these horizontals, two uprigths were found, one on the outside of the cellar and one lying beneath the horizontals. At the south end of the horizontals, one upright was found. It would appear that two upright posts were used at the corner for strength and support, while only a single upright was placed along the wall. Remains of cribbing logs were scattered throughout and in the southwest corner, there was a concentration of small logs where part of a cellar wall had fallen.

The interior of the cellar was composed of pieces of hard packed clay interspersed with pieces of chinking, small rocks, chunks of carbon and small fragments of wood from the burning, collapse and abandonment of the structure.

### 4.4.2 Cellar #2

A second smaller cellar was situated 1.8 m south of the fireplace (Fig. 28). It measured approximately 140 cm by 92 cm by 74 cm, and had been dug into a yellow, sandy clay soil. Remains were few consisting of a number of fragments of wood. No cribbing was found, and the cellar outline consisted of a dark stain where the cribbing had once been.

### 4.4.3 Fireplace

A mound of dirt and a rock pile located centrally in the southern part of the feature (Fig. 28) indicated the location of the fireplace in the warehouse. A layer of heavy thick gray clay, approximately 61 cm by 120 cm in diameter, constituting the firebox of the structure, and large quantities of chinking and burnt wood were found along the northern edge of the mound (Fig. 28). Approximately 61 to 92 cm south of the ash and rock concentration was a 61 cm by 120 cm area comprised of large flat rocks fitted relatively closely together which probably formed part of the hearth area of the fireplace. It appears that the fireplace was a substantial structure measuring approximately 2.5 to 3.1 m by 3.1 m and faced north.

## 4.5 Feature 5: Trading Shop and Cellar

Feature 5, probably the trading shop because of the large amount and type of artifactual material recovered, was located approximately 4.2 m northeast of the warehouse (Fig. 8). During the early days of the post, the trading shop consisted of a partitioned room in the storehouse (HBCA, PAM, B. 159/a/9, fo. 13d). The structure uncovered during excavation was built after 1828 when the northwest corner of the palisade was removed as it is situated outside the original north palisade (Fig. 8). The south wall of the foundation was outlined and the cellar within, along with the fireplace, were completely excavated (Fig. 29). The store was rectangular in shape measuring 7.5 m by 4.5 m (Fig. 29). The cellar was centrally located with the fireplace at the north end.

Evidence of the south foundation consisted of 30 cm squared timber (spruce) remains, 30 to 90 cm long, which were placed on sleepers in a shallow trench. One sleeper was found measuring 67 cm by 30 cm and running at right angles to the foundation. Two upright posts were located alongside the horizontal log approximately 90 cm apart as probable supports (Fig. 29). Two uprights were located at the southeast corner falling in line with the other two and the southwest corner of the store. The southwest corner is indicated by the ending of the trench and with the wood turning and continuing north 30 cm (Fig. 29). The post-on-sill construction employed for the warehouse was also most likely used here. Various pieces of wood were found. A log, 2.7 m by 6 to 10 cm, laying east-west and south of the main foundation may be from the remains of a previous structure existing in the area, or the shop after it had collapsed.

### 4.5.1 Cellar

The cellar depression measured 4.2 m by 4.2 m by .45 m, with the actual cellar being 2.4 m by 2.4 m by 1.8 m. The cellar had been dug into a mixture of dark gray and yellow-brown sandy soil.

Four sides of the outline of the cellar cribbing were evident. Along the uppermost log of the east wall, a "pot-hunter's" or rodent hole, 22.5 cm in diameter, was evident (Fig. 8). Upright square posts, 12.5 to 15 cm in diameter, were found at the four corners to which the cribbing was attached by the tongue and groove method. The cribbing of

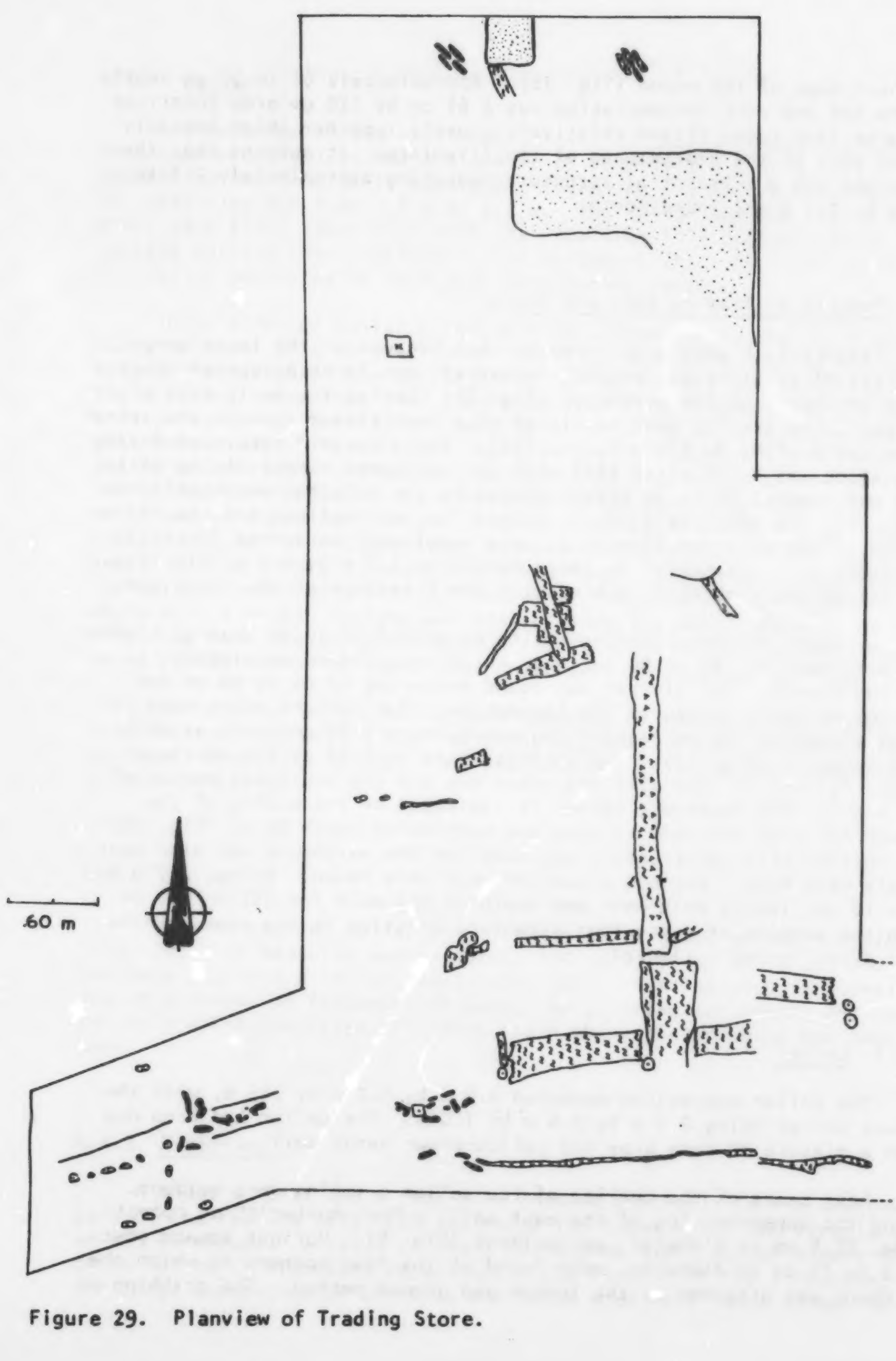


Figure 29. Planview of Trading Store.

the north wall consisted of nine logs, 120 cm by 10 to 15 cm, horizontally laid on one another with a vertical post wedged (and likely nailed) against them for support.

The floor of the cellar consisted of a layer of fine, yellow-brown sand over a hard, black sand, with bark overlaying the sand. In the northwest corner of the cellar this bark had badly deteriorated and consisted of a powdery dust, similar to the bark floor in the cellar of Feature 2. The remaining area of the north half of the cellar was covered by a few strips of very thin wood, randomly scattered throughout. The bark covering was most evident in the south half of the cellar (Fig. 30). Miscellaneous fallen planks from the structure, running in an east-west direction, were found lying on the cellar floor over the bark.

In the central part of the cellar, the uppermost portion approximately 30 cm in depth, was littered with a variety of artifacts and faunal bone, probably refuse deposited by the people when the building was abandoned. Underneath this refuse layer, approximately 54 to 60 cm below datum, a layer of rocks from a collapsed fireplace were found overlaying a clay apron at 60 cm below datum. This clay apron (Fig. 31) covered an area of approximately 4.5 sq. m and was approximately 2.5 cm thick. The presence of a dark area of ash on the clay apron (Fig. 31) suggests the use of an open stove probably in the later years of the trading shop's existence. It appears that the cellar was filled in and the clay apron deposited for this purpose. To the south of this clay apron existed a circular feature of water deposited clay approximately 60 cm in diameter (Fig. 31). At this level, artifacts were recovered only along the east, south and west walls of the cellar cribbing and around the periphery of the clay apron.

At 76 cm below datum, a number of large rocks were found placed against the north wall of the cellar, for support. It is also possible that these rocks had fallen in and landed against the north wall of the cellar and were not purposely placed there. A large squared timber (spruce), 180 cm by 15 cm, was found lying at a downward angle into the cellar with the top evident at 43 cm below datum and the bottom at 140 cm resting on the cellar floor. Two rows of nails extending the length of the log were evident (Fig. 29). This log probably was part of the main structure and had fallen into the cellar, when the building collapsed. The upper section of the log was surrounded by clay from the apron. Smaller fragments of wood were recovered throughout the cellar, some pieces being nailed together at right angles, possibly fragments of fallen cellar cribbing.

### 4.5.2 Fireplace

Remains indicating the location of the fireplace were few. This would be expected if the fireplace was situated in the north end of the

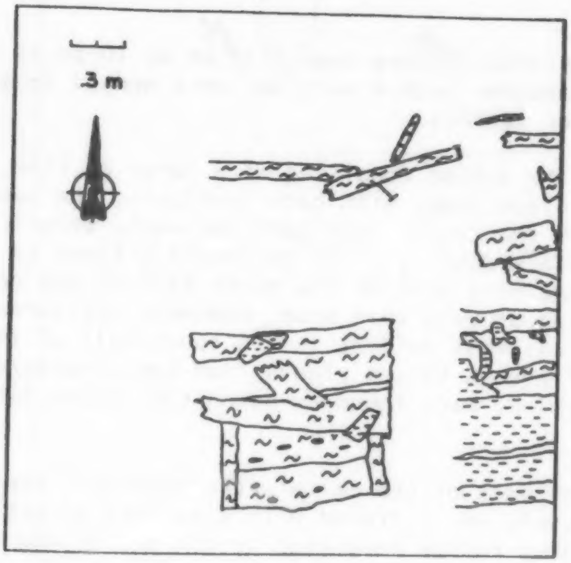


Figure 30. Bark on cellar floor of Trading Store.

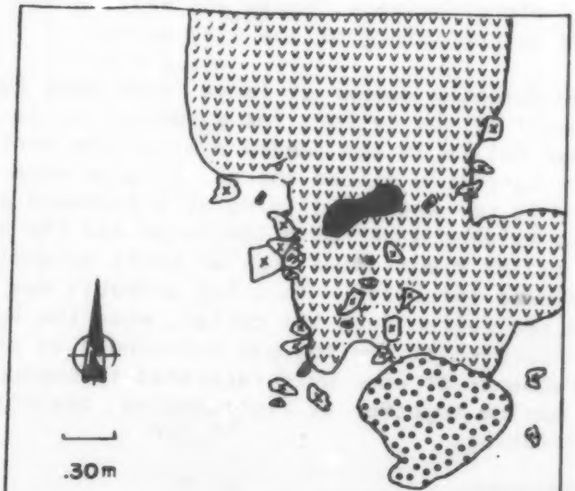


Figure 31. Clay apron in cellar of Trading Store.

structure and probably against the north wall and was removed and replaced by an open stove centrally located. Concentrations of ash, chinking, burnt wood and a few rocks were uncovered (Fig. 29).

## 4.6 Feature 6: Men's House and Cellar

The men's house or feature 6 was located approximately 15 m southeast of the store and 22.5 m east of the warehouse (Fig. 8). Allan McDonell, in 1824, mentions measuring "off a range for houses opposite the store and officers house 8 feet by 20 to be divided into four rooms, one to form the Indian gard room and the other the men's houses..." (HBCA, PAM, B. 159/a/8, fo. 12). The building was constructed with binders, reach poles and logs. The 1824 journal reads, "...putting up the reach poles and binders at the Indian and men's houses..." and "...at the men's houses laying the binders, and logs" (HBCA, PAM, B. 159/a/9, fos. 12d-13). In 1830 John Clarke mentions repairing the Men's Houses (HBCA, PAM, B. 159/a/12, fo. 4d). Archaeologically, the evidence for the men's house consisted of a cellar depression which was completely excavated. No structural features of the building were found.

### 4.6.1 Cellar

The cellar depression measured 2.7 m by 4.5 m with the actual cellar being rectangular and measuring 3.3 m by 2.55 m by 1.8 m. The cellar had been dug into sandy gray soil. The cellar outline was evident on all four sides along with cribbing remains.

The south and east walls both contained nine logs horizontally laid on one another to a height of 96 cm. A bone fleshing tool was found between the fourth and fifth logs of the south wall cribbing. Four cribbing logs, 3 m by 10 cm, were uncovered on the west wall (Fig. 32), and two, approximately 2.5 m by 12.4 cm, on the north. Round vertical posts, 15 cm in diameter, were uncovered at the four corners of the cellar. The cribbing logs were dovetailed into the corner posts. These corner posts were set into holes 21 cm in diameter.

The floor of the cellar consisted of packed gray yellow sand. There is no evidence that it was covered with bark or wood. In the central part of the cellar, concentrated areas of bone and charcoal were found, in the uppermost section approximately 72 cm below datum. At 81 cm below datum, part of the cellar wall had caved in as a result of the fire of 1843. In the southeast corner at 90 cm below datum, a number of large rocks were found, which appear to form a circle around an area of hard clay. Large rocks continue to be found beneath this area to the bottom of the cellar (Fig. 33). This large number and concentration of rocks in the southeast section of the cellar suggests that a chimney or fireplace collapsed and fell in, possibly during the fire.

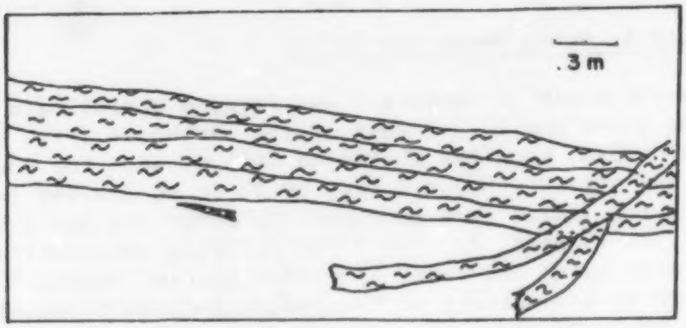


Figure 32. Cribbing of west cellar wall, Men's House.

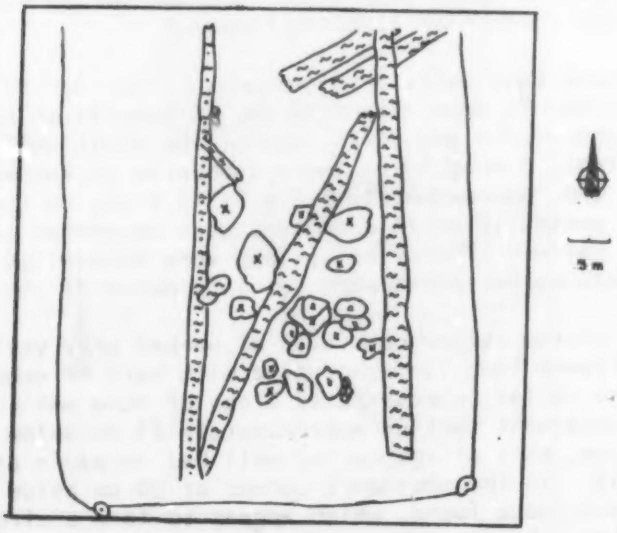


Figure 33. Rocks, timbers and logs on cellar floor of Men's House.

Two large timbers and one round log were found resting on the cellar floor and rocks (Fig. 33). The timbers both measured 3 m by 1.8 m, and one ran north-south while the other ran northeast-southwest. These were probably part of the main structure and had fallen into the cellar when the building burned or collapsed. The two round logs measured 3.3 m by 10 cm and 2.7 m by 10 cm, and ran north-south and east-west respectively. These probably belonged to the cellar cribbing. Miscellaneous wood, both natural and charred were found scattered throughout.

## 4.7 Feature 7: Barn/Stable

The original stable (feature 7) was located immediately west of the east palisade and approximately 6.2 m northeast of the men's house (Fig. 8). On November 2, 1824, Allan McDonell records that the men were "cutting logs and preparing posts for a forge, workshop and stable..." (HBCA, PAM, B. 159/a/8, fo. 14) and on November 4, 1824, that the men were employed "...putting up the posts of the blacksmith's forge, workshop and stable which range of buildings is to be 30 feet by 10 feet contiguous to the Pickets in the N.E. corner of the Fort..." (HBCA, PAM, B. 159/a/8, fo. 14d). Excavations revealed that this feature did run contiguous to the "Pickets" and would have been located in the northeast corner of the original post (Fig. 8). Five floor joists, approximately 3.1 m long and 7.5 to 10 cm wide, were found running in a north-south direction (Fig. 34). A sleeper or runner was found running at a right angle underneath the floor joists. It was approximately 180 cm long, with the last 61 cm being burnt, and 15 cm wide. It probably ran the "10 foot" width (3.1 m) of the structure. An ash pit was found along the south end of the excavation and may date to the fire of 1843 when a good portion of the post was destroyed.

It is not known how long this structure was used, but in 1828, John Clarke intended erecting a new stable after removing the front stockade (HBCA, PAM, B. 159/a/10, fo. 9d). From the historic records, it appears that the new stable was erected in 1830, "...getting wood for a Stables..." (HBCA, PAM, B. 159/a/12, fo. 9) and "...building a Stable for inclosing a Small yard to it..." (HBCA, PAM, B. 159/a/12, fo. 10). This stable was not located during excavation. In 1831, John Clarke notes that "...the New Fort is Enlarged Sufficiently to admit having the stables..." (HBCA, PAM, B. 159/a/12, fo. 32). Whether the original stable was still standing at this time is not known.

## 4.8 Feature 8: Blacksmith Forge

The first blacksmith shop was constructed in 1824, along with the workshop and stable, which were contiguous to the pickets in the northeast area of the post (HBCA, PAM, B. 159/a/8, fo. 14d). Feature 7, probably the blacksmith forge because of the large amount of metal arti-

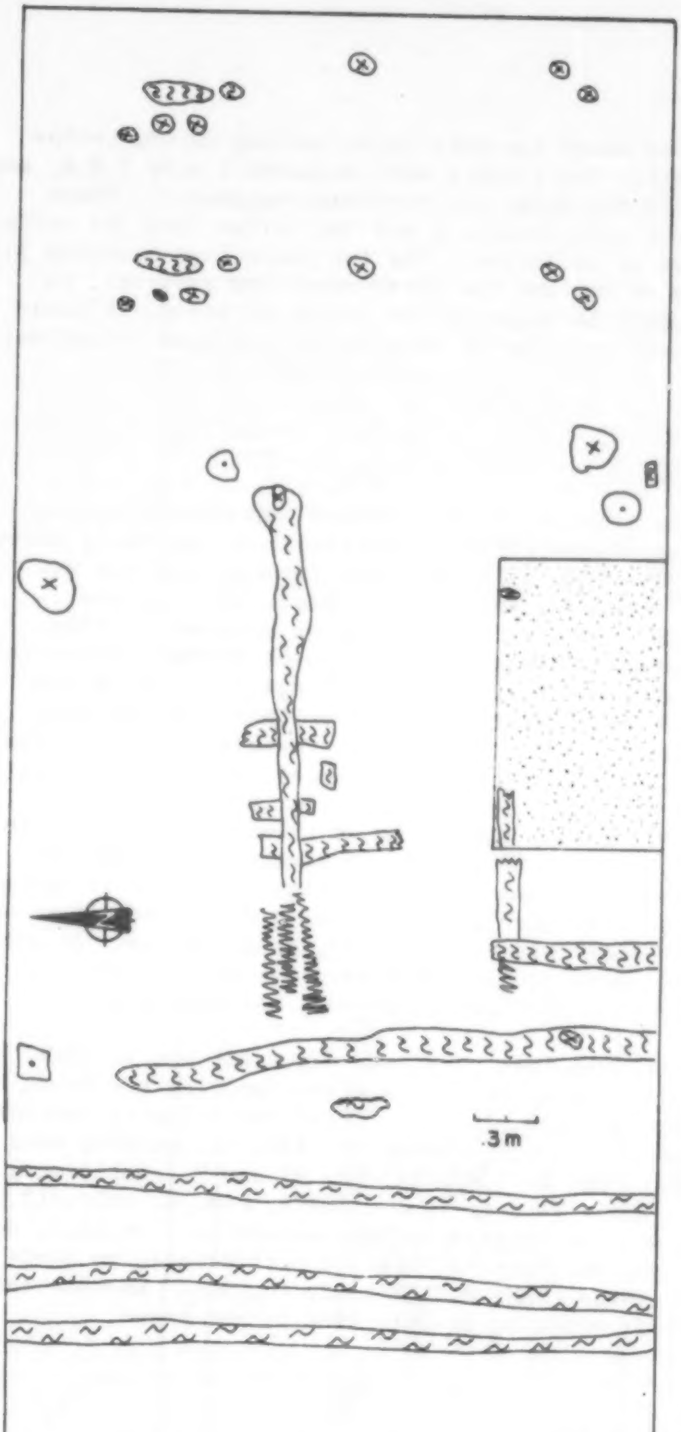


Figure 34. Barn/Stable Area.

facts recovered, was located 1.5 m southwest of the barn/stable complex (Fig. 8). Large amounts of charcoal and burnt wood were evident, outlining a rectangular structure approximately 2.5 m in length and 1.4 to 1.5 m in width (Fig. 35). A post was uncovered in the southeast corner. These remains probably indicate the location of the tempering trough. A profile of the west wall (Fig. 36) reveals that the tempering trough was a rectangular structure 150 cm in diameter and 92 cm deep. The structure was constructed in sandy/clay soil. A thin layer of clay, 5 cm thick, was found overlaying a thicker layer of charcoal up to 25 cm thick. Below this, a few fragments of wood were found, indicating possibly the floor of the trough. According to Allan McDonell's journal, the forge had two chimneys (HBCA, PAM, B. 159/a/8, fo. 15d). However, neither of these were found during the excavations.

## 4.9 Feature 9: Second Blacksmith Tempering Trough

The locale of a second blacksmith shop was found in the northeast area of the post, 1.2 m west of the extension of the original east palisade (Fig. 8). Although no reference in the journals was found for the building of this structure, it may be assumed from its location that it was probably constructed in the 1830s after the post was enlarged by John Clarke. In 1843, Cummings has the men pulling down the forge and the carpenter's shop. Presumably he is referring to this structure.

The remains of the tempering trough are more substantial than in the other blacksmith shop and indicate a rectangular structure 2.3 m by 61 cm by 61 cm (Fig. 37). The tempering trough was a log construction consisting of seven round poles, 10 to 12.5 cm in diameter, horizontally laid, forming the walls and toe-nailed to four upright corner posts of the same diameter. Burnt bark and wood, powdery in consistency, were present at the bottom of the tempering trough. A moose scapula and a hoe were recovered in the trough.

Two ash pits were located approximately 1.8 to 2.5 m west of the tempering trough and were probably associated with the blacksmith shop (Fig. 37). The larger pit had a diameter of 120 cm and a depth of 49 cm with a basin shaped profile. Large amounts of charcoal and clinkers along with a number of stones were recovered. The smaller concentration of ash, 30 cm by 61 cm, was basin shaped and had a depth of 15 to 20 cm. Charcoal and ash were all that were found in this feature.

## 4.10 Miscellaneous Features

### 4.10.1 Miscellaneous - 1: North Cellar

A cellar feature was excavated in the northern area of the post approximately 3.1 m south of the northernmost palisade (Fig. 8). The

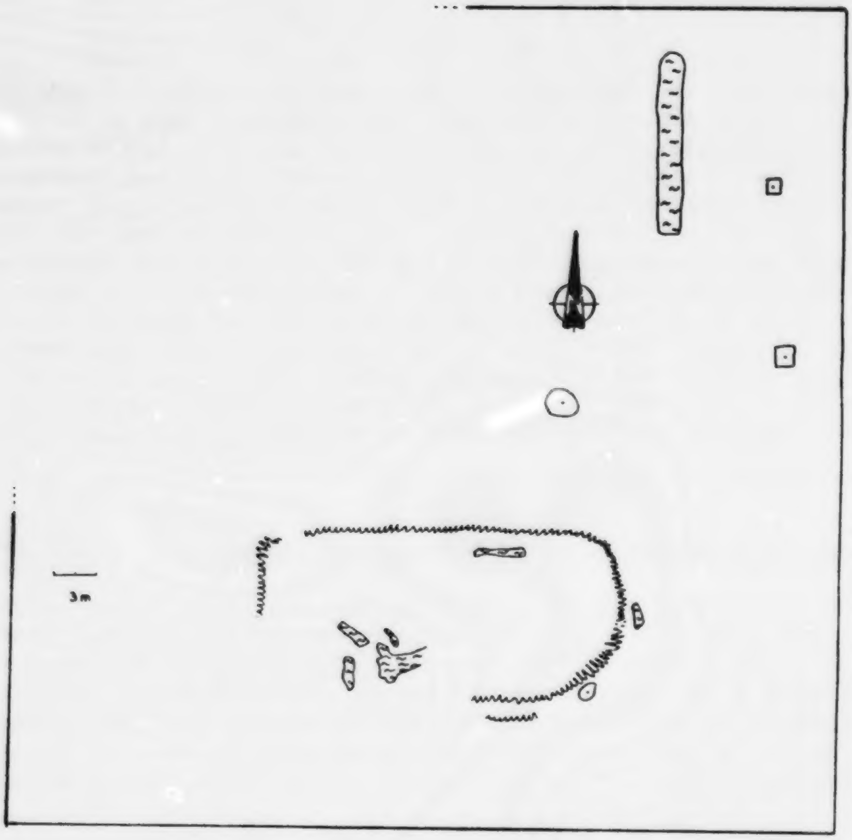


Figure 35. Blacksmith Shop Forge Area.

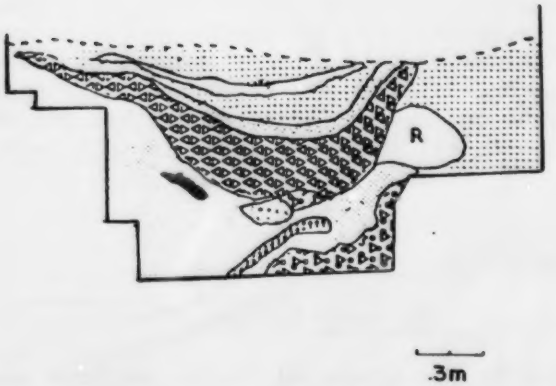


Figure 36. East facing west wall profile of Blacksmith Shop Forge.

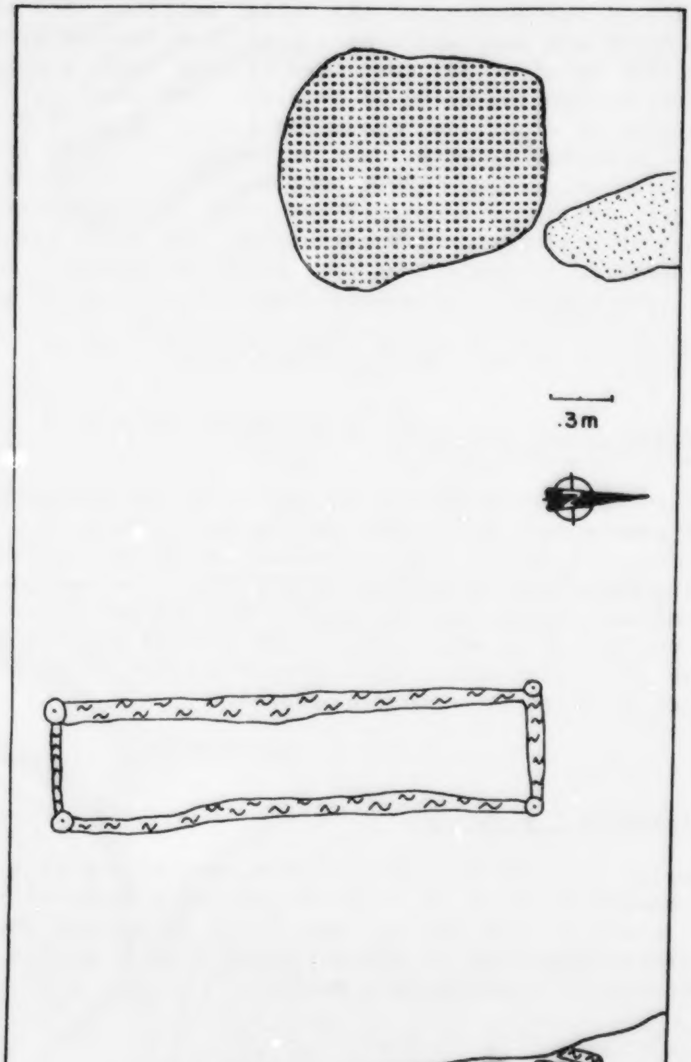


Figure 37. Blacksmith tempering trough and ash pits.

cellar measured 2 m by 1.8 m by 1.2 m and had been dug into light sandy soil. Four sides of the outline of the cellar cribbing were evident (Fig. 8). The north and east walls were greatly disturbed by rodents. The west wall cribbing (Fig. 38) consisted of five logs, 2 m by 10 to 12.5 cm, with the bottom log being 25 cm wide. The south wall cribbing (Fig. 39) consisted of eight logs measuring 2 m by 10 to 12.5 cm. Four uprights, 10 cm in diameter, were found at the corners with the horizontal logs dovetailed into them. These continued 61 cm into the ground below the cellar. Artifacts recovered consisted of glass, metal and numerous amounts of splintered bones and china. No other structural remains were recovered to provide an indication of its use. Because of the artifacts, this probably represents a dwelling belonging to one of the men.

### 4.10.2 Miscellaneous - 2: Ash Pits

Two ash pits were found during the course of the excavation. These were located approximately 4.6 m west of the men's house (Fig. 8). The larger of the two is circular with a diameter of 92 cm. A number of large bones were found on the surface of the pit. The remainder of the pit consisted of ash, burnt bone and wood. The pit was 30 cm deep with a rectangular profile (Fig. 40). The second ash pit had a diameter of 120 cm, a depth of 12.5 cm and a basin shaped profile (Fig. 41). Ash and a few pieces of burnt wood were uncovered.

### 4.10.3 Miscellaneous - 3: Cellar

This circular feature is located 15.4 m west of the west palisade (Fig. 8). It measured 150 cm in diameter and had a depth of approximately 60 cm. Areas of sand and ash were found throughout the feature (Fig. 42). Remains consisted of stones, bone, wood fragments, lime and ash. No structural remains were evident.

### 4.10.4 Miscellaneous - 4: Fur Press

This feature was located 16.9 m outside the west palisade. The structure consisted of two square posts, 12.5 cm in diameter, situated 150 cm apart in an east-west direction (Fig. 43). These continued 54 cm below the surface. Between these two posts was a layer of moss with burnt wood throughout. This moss layer covered an area 92 cm north-south by 46 cm east-west. At the end of this moss, one large square log, extending 6.2 m north, was uncovered. A number of rodent disturbances were found along this log. To the south of the two square posts, burnt wood and square log, an oval depression area was outlined in bark. It was 170 cm long and 92 cm across at its widest point, with a depth of

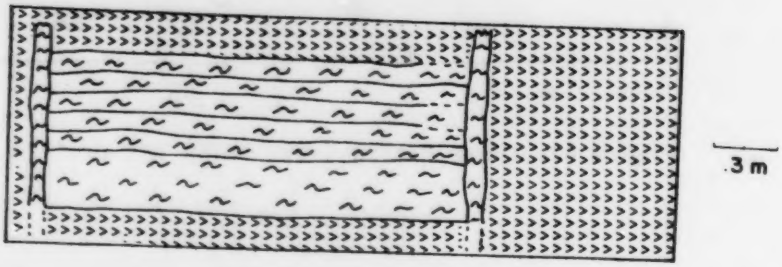


Figure 38. Cribbing of west wall, North Cellar.

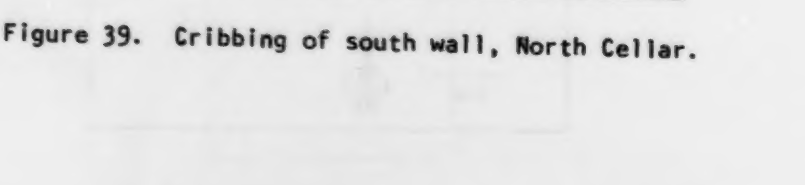


Figure 39. Cribbing of south wall, North Cellar.

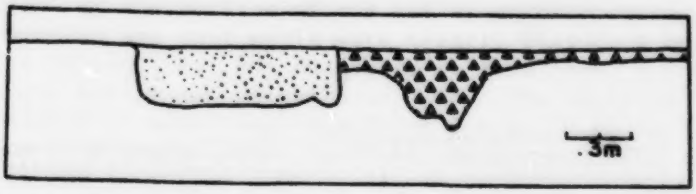


Figure 40. West facing (east wall) pit profile.

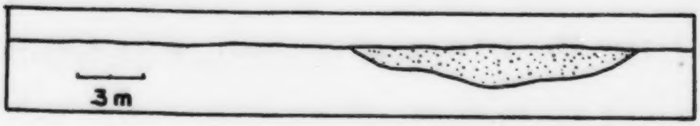


Figure 41. South facing (north wall) pit profile.

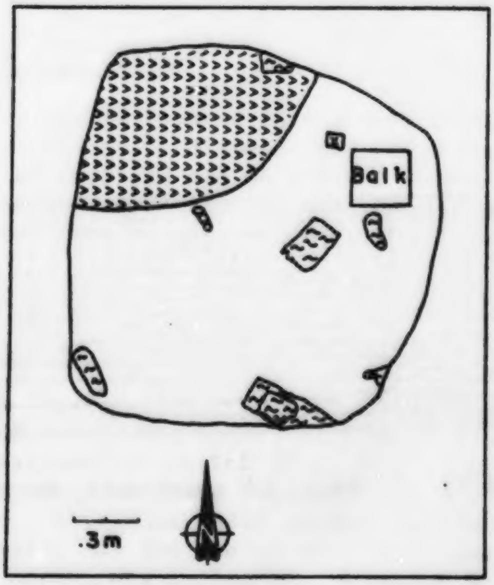


Figure 42. Cellar feature west of palisade.

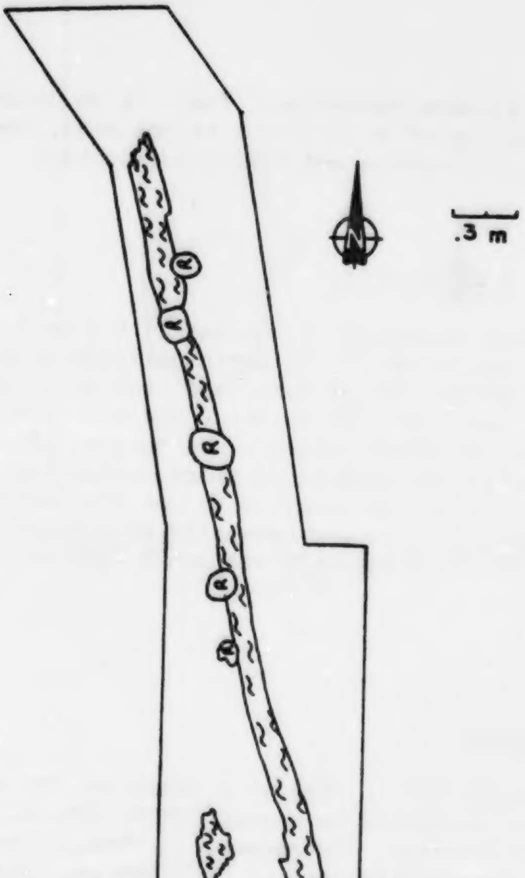


Figure 43. Fur Press.

23 cm. Very few artifacts were recovered. There is no documentary evidence for the construction of a fur press at the post, however, one would be a necessity in compressing and making fur packets.

### 4.10.5 Miscellaneous - 5 and 6: Pits

Two pit features were excavated 15.4 m and 21.5 m west of the west palisade and beside the extension of the north palisade (Fig. 8). The first pit (Misc.-5) had an outline of burnt red sand with light sand, ash and charcoal intermixed within (Fig. 44). The pit measured 120 cm by 61 to 76 cm by 19 cm. Artifact recovery was sparse. The second pit (Misc.-6) was basically rectangular in shape, measuring 140 cm by 60 cm, with a narrow extension, 50 cm by 19 cm, at the north end (Fig. 45). The pit had a depth of 70 cm and consisted of a mixture of black soil and yellow sand. Artifact recovery was again sparse.

## 4.11 Discussion

### 4.11.1 Construction Phases

Fort Pelly was established in 1824 as a temporary HBC post to be maintained in winter and abandoned in summer (HBCA, PAM, D. 4/99, fo. 46d) in order to lessen expenses. Therefore, in 1824, Allan McDonell, a Chief Trader who was responsible for the location and construction of the post, in compliance with the wishes of the HBC, established a small post of "120 feet square", with the necessary buildings. These consisted of: a store, measured off at 40 feet by 20 feet; an officer's house, 40 feet by 20 feet, to be divided into three rooms; a range of houses opposite the store and officer's house, 8 feet by 20 feet to be divided into four rooms, one to form the Indian guard room and the other the men's houses; a small kitchen at the Indian's and men's houses; a range of buildings, 30 feet by 10 feet contiguous to the pickets in the northeast corner of the Fort, to contain the blacksmith's forge, workshop and stable; a saw pit; and a boat yard (HBCA, PAM, B. 159/a/8, fos. 10, 11, 11d, 12, 12d, 14d, 15, 21). Archaeological excavations of the post revealed portions of the original east, south and north palisades constructed in 1824, and the men's house and the stable and blacksmith shop which were located in the northeast corner of the post, contiguous to the pickets (Fig. 8).

No improvements or additions were effected at the post until the arrival of John Clarke as Chief Factor in 1826. In 1828, he comments that:

> ...Fort Pelly as stands at present Has a good dwelling House, Indian House a range of Mens House Stores and Stables, well stockaded in and with Bastians

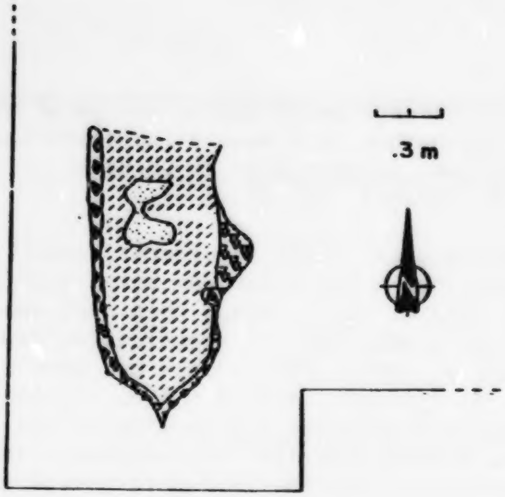


Figure 44. Pit feature beside north palisade.

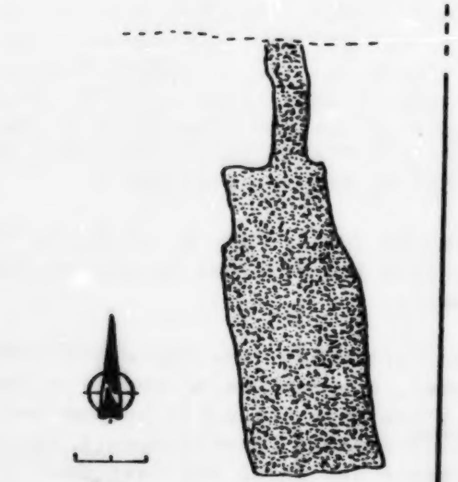


Figure 45. Rectangular pit beside north palisade.

> which was not the case on my taking charge of the District it being then in a most dilapitated state Hardly fit for any purpose with no Gardens. (HBCA, PAM, B. 159/e/3, fo. 3).

In order to accommodate all these structures, John Clarke mentions in his journal (1828-29) that a new ditch was being dug for purposes of removing the northwest side of the stockade (Fig. 46) and that the front stockade was being moved "preparatory to erecting Two new buildings, absolutely necessary say an Indian Shop, House and general Store and Stable..." (HBCA, PAM, B. 159/a/10, fos. 7 & 9d). Archaeological evidence indicates that a structure does lie outside of the stockade (Fig. 8) in the area that would have comprised the northwest corner of the original post. Archaeological testing failed to reveal any evidence of a west palisade having been constructed beyond the new building. However, the north palisade had been moved northward approximately 15.3 m (Fig. 46) and a west palisade abutting against the new building was constructed to meet the north one (Fig. 46). This initial enlargement of the post in 1828, with the addition of two new buildings, represents the beginning of an improvement programme which was to continue for the next few years before attracting the attention and criticism of George Simpson in 1832.

In April of 1831, John Clarke records that: "The New Sawn Stockade heads for Three Sides of the Fort is ready for putting up..." (HBCA, PAM, B. 159/a/12, fo. 29), and in June that the "Old Stockade of the Fort was being pulled down" (HBCA, PAM, B. 159/a/12, fo. 3). He leaves room in his journal entry for the new dimensions of the post, "...the Square of the Fort is feet by ..." (HBCA, PAM, B. 159/a/13, fo. 5d), but these, unfortunately, were never entered. Archaeological evidence (Fig. 46) suggests that the new dimensions of the post were 61.5 m by 49.2 m. A new kitchen built at this time (HBCA, PAM, B. 159/a/13, fo. 5d) was also found during SMNH excavations.

In 1832, George Simpson (HBCA, PAM, D. 4/99, fo. 47d) in his report to London comments upon the original intentions for the post and its subsequent developments:

> ...established Fort Pelly, for the winter, abandoning it in summer, but from being merely a temporary Post, it has since then gradually become one of the most expensive permanent Establishments in the Country, the different Gentlemen who have been in charge thereof exhausting their ingenuity and wasting means in embellishments and fanciful improvements.

In 1836, Thomas Simpson (1843:38), on his way to the Athabasca, passed through Fort Pelly and notes that it was "a well compact post...". The archaeological evidence would appear to concur with the above statements of George and Thomas Simpson concerning the physical properties of the post.

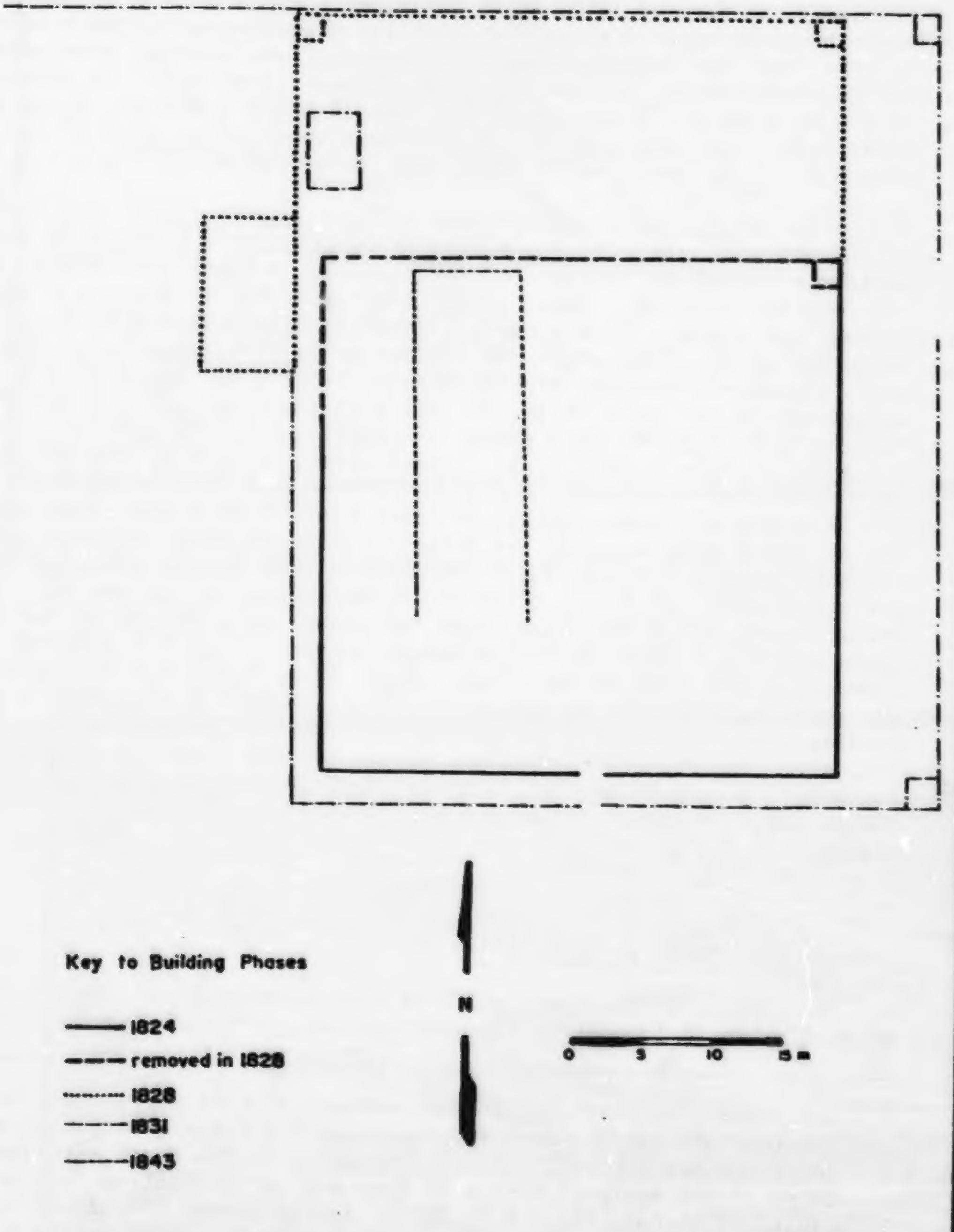

Key to Building Phases
1824
removed in 1828
1828
1831
1843
N
0
5
10
15 m

Figure 46. Building Phases of Fort Pelly 1.

After George Simpson's remarks in 1832, no mention of the construction of new major buildings or expansions is found in the journals, until after the fire of 1843, which destroyed a large portion of the post. Reconstruction began immediately under the direction of Cuthbert Cummings. At this time, the large warehouse (storehouse) was erected, plus a number of other houses (October 23, 1843, Cuthbert Cummings). In 1844, an 18.4 m byre was built outside of the Fort (Cumming's Journal, March 25, 1844). By this time, stables had also been constructed north of the post and by 1853 were fenced (HBCA, PAM, B. 159/a/18, fo. 14d).

After 1856, when a new post was built on higher ground, the stables of the old post continued to be used for cattle while a number of other buildings housed the servants of the company. A photo (PAC C-4580) of the post has survived. Taken in the summer of 1858 by H.L. Hime, photographer for the H.Y. Hind expedition, during their sojourn at Fort Pelly, (Hind 1971:xiiii), the photo was assumed to be of Fort Pelly 2. However, a comparative study of the terrain, skyline and layout of the structures in the photo (Figs. 21, 47) with the plans and sketches of Fort Pelly 2 (Fig. 48) by a number of people[1], makes it apparent that the photo is that of Fort Pelly 1, most likely taken from Fort Pelly 2.

A number of structures can be identified in the photo. The stockade or fenced area encloses the byres and stables, which Cummings mentions as being built outside of the post in 1843. These continued in use for a number of years, after the establishment of the new post. The stockade around the actual post had either been removed or had decayed and only a bastion or blockhouse (Number 1, Fig. 47) remained standing at the time of the photo. Other identifiable structures in the photo include: the warehouse/storehouse (Number 2, Fig. 47), the trading store (Number 4, Fig. 47) and possibly the kitchen (Number 5, Fig. 47). The structures labelled Number 3 and 6 (Fig. 47) were not found during excavation, nor is there specific reference to them in the journals. Various structures were used after 1856 as servants' quarters.

### 4.11.2 Architectural Style

Architectural knowledge obtained from archaeological remains is often limited to foundation elements such as sills, joists, flooring,

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[1] Gil Watson, in charge of the excavations at Fort Pelly 1 and Harry Erhlich, a local resident involved with the excavations, studied and discussed the affiliation of the post in the photo with James Chism of the National Museum of Man, who was conducting test excavations at Fort Pelly 2 in 1971. In the summer of 1980 while at the site, I had a chance to compare the photo with the terrain and skyline of Fort Pelly 1 and reached the same conclusion.

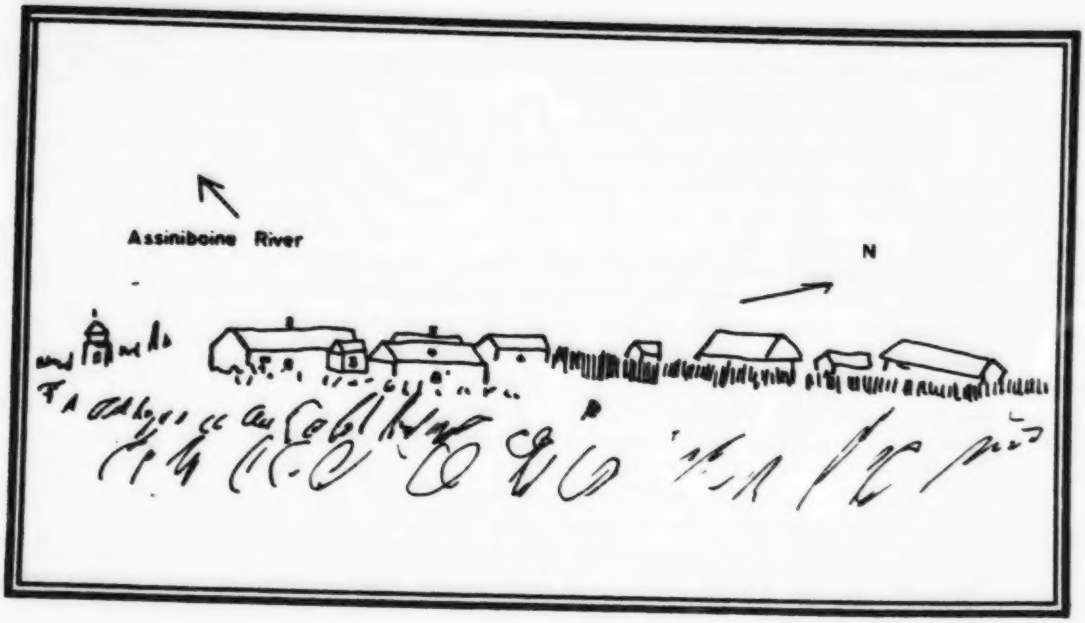
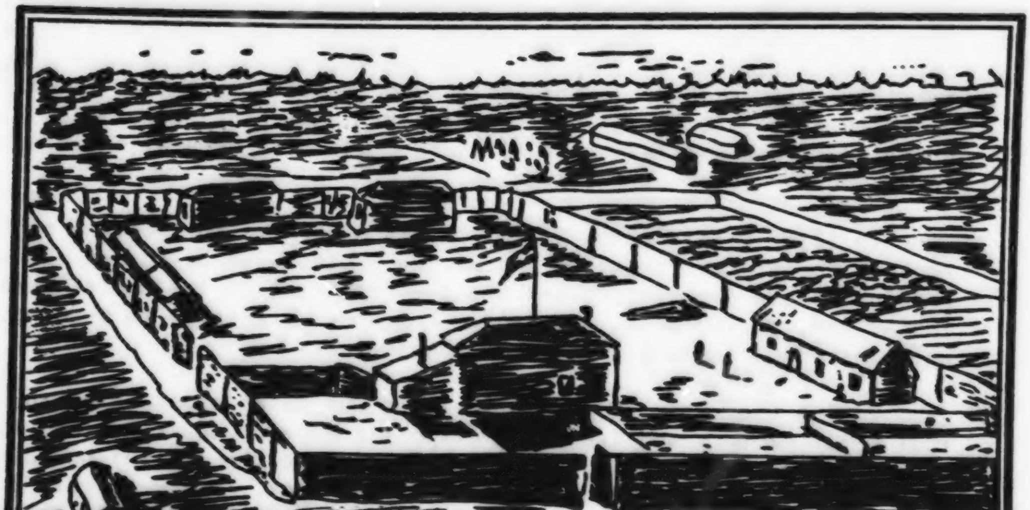

Assiniboine River
N

Figure 47. Sketch outline of buildings in photo of Fort Pelly 1.



(adapted from a sketch by Martineau in Canadian Illustrated News in 1876)

Figure 48. Sketch outline of Fort Pelly 2.

and cribbing. Evidence pertaining to doors, window coverings, roof construction, etc., may be gained from Chief Factor's or Trader's journals, various sketches and photos.

The first mention of building construction at Fort Pelly in 1824, apart from the palisade trenches, pickets and ribbands, consists of putting up the posts for the trading shop and store. This began as a single story structure with a portion for the trading shop, but in 1825 an upper floor was added (HBCA, PAM, B. 159/a/8, fos. 14, 28). The next step in the construction consisted of "filling out the post of the store with logs, carting and cutting logs and roofing sticks, sawing boards for doors..." (HBCA, PAM, B. 159/a/8, fo. 11). Once the walls had been raised, the store was "covered with roofing stick (roof) and mudded (walls)" (HBCA, PAM, B. 159/a/8, fo. 11d). McDonell notes next that turf was dug to cover the store roof and boards were being sawn for flooring (HBCA, PAM, B. 159/a/8, fo. 11d). McDonell is more explicit on the use of roofing sticks and turf in his comments on the Indian/men's house. He states that the men were "dragging logs N roofing sticks, cutting grass for the roofs" (HBCA, PAM, B. 159/a/8, fo. 12d). The photo (Fig. 21) indicates that a gabled roof construction was employed in the later part of the fort's existence and most probably in its initial phase as well.

The construction of the subsequent buildings, the officer's house and the Indian/men's house and the kitchen basically followed that of the store. Apart from the wall pieces, McDonell mentions the use of beams and binders in the officer's house, which was to be divided into three rooms. Reference is also made to the "making" of three chimneys and the fixing of parchment windows (HBCA, PAM, B. 159/a/8, fos. 11d, 12d, 13). The partitions dividing the rooms in the officer's house were also mudded as well as the outer walls (HBCA, PAM, B. 159/a/8, fo. 14). With regards to the Indian/men's house, which was to be divided into four rooms, McDonell notes the cutting of reach poles, logs and binders and the laying of sleepers. Sleepers were also employed in the construction of the kitchen.

In 1830, Chief Factor Colin Robertson reports the mudding of the roof of the stores, the covering of the houses with bark, and the whitewashing of the dwelling houses and the repairing of the men's houses (HBCA, PAM, B. 159/a/12, fo. 33d). Frequent references to mudding and whitewashing are found throughout the journals.

During the early 30s, when the post was being expanded by the various Chief Factors and traders, mention is made of squaring logs for the building. McDonell's journal, referring to the initial building of the post, makes no reference to squaring logs. However, this does not eliminate the possibility. The final phase of building consisted of sawing boards for the doors.

Building methods at Fort Pelly I as revealed by the archaeological excavations generally corresponded to the references in the journals.

Squared foundation logs placed on sleepers were found at the warehouse and the store. Because the foundations of the men's house and the kitchen were not located, the building techniques as described in the journals could not be ascertained. In the stable, remains of floor joists and sleepers were found. The post-on-sill construction evident for the warehouse was a common technique employed at 19th century HBC posts (Barbeau 1945:10).

Archaeological excavations also provided information on the construction methods used for cellars for which no journal entries were found. The cellars were rectangular and cribbed with round logs joined at the corners by one of three methods: tongue and groove, dove-tail, or butted and toe-nailed.

## CHAPTER FIVE

# ARTIFACT ANALYSIS AND DISCUSSION

### 5.1 Artifact Analysis

The artifacts recovered at Fort Pelly 1 represent a large and varied collection of items and reflect a number of diverse activities. These are presented in the appendices. The artifacts are grouped here into broad, general functional categories. A number of functional schemes have been designed by South (1977), Stone (1974) and Kidd (1970) to deal with historic artifacts, however, each is dependent upon the specific questions and hypotheses formulated by the authors and, therefore, is subjective and arbitrary. No one universal classification scheme has been established or accepted. The functional scheme outlined in Table 4 is the one employed here for artifact analysis. (Faunal material will not be analyzed.) Some overlap between functional categories is unavoidable. For example, guns could be included in either hunting and subsistence or trade goods, and pipes could be grouped in social/leisure or personal. In such cases, a subjective arbitrary decision has been made. Within the general functional groupings, the artifacts are organized into classes which are subsequently divided into types.

Analytical emphasis is placed on certain artifact classes, especially ceramics, glass and pipes which can provide useful and quantifiable information about specific research questions and hypotheses. Analysis of the remaining classes is preliminary in comparison. However, it provides (1) information for more general research questions and hypotheses, and (2) an inventory for further study. The analysis of any one class, including the ceramics, glass and pipes, is by no means exhaustive or definitive.

Measurements are recorded in the metric system for the various artifact classes, except for the ceramics and nails. Since these were made in accordance to certain specifications in use at the time of their production in Britain or America, the English system of measurement is used.

Regarding the material analysis of metal artifacts, no complex metallurgical analysis is attempted and all determinations of composition are based on visual observation of colour. The following metal categories are used: yellow metal, which includes brass, copper and gold; gray metal which includes lead, pewter, tin and zinc; white metal which includes silver, nickel and aluminum; and ferrous metal which includes iron and steel.

TABLE 4

Functional Categories Employed for the Artifact Analysis

| HOUSEHOLD | PERSONAL | CLOTHING | SOCIAL/LEISURE | TRADE GOODS |
|---|---|---|---|---|
| ceramics<br>tableware<br>glassware<br>bottles (liquor, beverage, pharmaceutical)<br>cooking ware<br>storage ware<br>furniture hardware | smoking equipment<br>jewellery<br>coins<br>hair combs<br>writing/reading equipment | buttons<br>clothing hardware<br>sewing equipment (needles, thimbles)<br>buckles<br>footwear | musical instruments | beads<br>metal trade points<br>tinkling cones |

| ARCHITECTURAL | WORK ACTIVITIES | PREHISTORIC & NATIVE | MISCELLANEOUS |
|---|---|---|---|
| construction hardware (hinges, hasps, pintles, etc.).<br>door closures or fastenings (handles, latch bars, etc.)<br>door lock parts and accessories (lock plates, keys, etc.)<br>fastenings (bolts, rivets, washers, staples)<br>nail/tacks<br>window glass | tools<br>stable/barn items<br>transporting hardware (bale seals)<br>miscellaneous hardware | lithic | lead discs<br>metal rings<br>birch bark basket<br>metal rods and bars<br>wire<br>scrap metal |

Numbers found in parentheses throughout the artifact distribution sections and in certain descriptive sections include quantities.

## 5.2 Discussion

Archaeological investigation and historical documentation concerning the fire of 1843, the planned abandonment of the post in 1854, and its use in subsequent years for servants' quarters and church services, provide relevant information for the interpretation of the artifacts. These, in turn, substantiate historical documentation and archaeological interpretations and hypotheses regarding socio-economic stratification, activity centres, etc. The following section deals with the results of the artifact analysis. In some cases, the functional group is discussed as a whole, while in other instances, the artifact types within a functional group are discussed separately.

### 5.2.1 Household

#### 5.2.1.1 Ceramics

The majority of ceramics found at Fort Pelly 1 consisted of earthenware produced by Copeland and Garrett (1833-47) and W.T. Copeland (1844-67). This is not unique as the Copeland firm, throughout its ownership changes, was the commissioned supplier of white earthenware to the Hudson's Bay Company from 1833 onward. A large number of W.T. Copeland marks were found as opposed to Copeland and Garrett marks, although the post was in operation for a much earlier period, from 1824 to 1856. Forty-six "Late Spode" and four "Copeland" marks of W.T. Copeland were found in comparison to three Copeland and Garrett marks. Discrepancy in numbers between the two may possibly be explained by the following historical and archaeological data. First, excavations tended to centre on structures from the later part of the post's operation that were still in existence and possibly in use after 1856. Secondly, the fire of 1843 probably damaged large amounts of ceramics, obscuring marks and necessitating the ordering and purchasing of additional items. Thirdly, complete and useable Copeland and Garrett vessels would be moved along with other useable goods to the new post in 1856.

Thirty-seven Spode/Copeland patterns were identified, but only 11 are found in any quantity. These are listed in Table 5 in order of quantity. Sussman (1979) recorded the various Spode/Copeland patterns found at twenty Hudson's Bay Company posts. The number of posts at which each of the above patterns occur was also listed in Table 5. It is apparent that most of the patterns found at Fort Pelly 1 were also represented at 12 to 18 other posts, with the exception of Lotus and Byron Groups. No quantities for these individual patterns at each post

TABLE 5

Best Represented Copeland Patterns

| Pattern Name | Date | Quantity | No. of Other HBC Posts Recorded at. |
|---|---|---|---|
| Flower Vase | 1828 - 20th | 218 | 18 |
| B700 | c.1838 - p - 1847 | 204 | 12 |
| B772 | c.1839 - p - 1882 | 201 | 18 |
| Continental Views | 1845 - p - 1882 | 148 | 17 |
| Alhambra | 1848 - p - 1882 | 143 | 12 |
| Broseley | c.1818 - p - 1847 | 100 | 13 |
| British Flowers | 1829 - 1974 | 83 | 14 |
| Lily | 1837 - 20th | 66 | 13 |
| Byron Groups | post 1833 | 61 | 5 |
| Lotus | 1850 - | 58 | 4 |
| Ruins | 1848 - 20th | 58 | 15 |

The remainder of the patterns have less than 50 pieces is available, which makes it difficult to assess the popularity of any one pattern. In fact, it appears that the individuals at the post had very little say in the patterns chosen. This is apparent in the accounts where ceramics are referred to by ware type with no mention of pattern (HBCA, PAM, B. 159/d/37a, fo. 2; B. 159/d/37b, fo. 5). Apparently, the patterns and quantities of each to be sent to the various posts was decided either by the Hudson's Bay Company clerks in England or the Copeland firm with the individuals at the post having little input in the decision.

The remainder of the earthenware found at Fort Pelly was made by a number of manufacturers including Sampson and Bridgwood, Wood and Brownfield, Robert Cochran, Ridgway, Pinder, Bourne and Hope and Charles Meigh. Most of these firms began producing earthenware during the 1830s, 40s and 50s. Earthenware produced by unknown manufacturers and decorated by various techniques such as stamped, sponged, and banded, which were popular in the latter half of the 19th century, were also found. The presence of these non-Copeland ceramics attests to the fact that supplies were being obtained from other sources besides the Hudson's Bay Company. Most likely these were from the Red River district which had access to larger centres and with whom Fort Pelly interacted. Also, many of the men working at the post and the free traders in the area came from the Red River District bringing their own supplies and goods.

The ceramic articles recovered, Copeland and non-Copeland, consisted mainly of tableware and toiletware. No toys or dolls were found. This may be related to removal when the post was abandoned. The tableware articles consisted chiefly of plates and bowls in varying sizes; tea cups; mugs and pitchers; and one or two serving pieces. A few more elaborately decorated and expensive pieces such as a mauve "Lotus" sauce tureen and a bone china bowl were also present. Toiletware articles included basins, chamber pots and a soap dish. These were restricted to the kitchen, factor's house and the North cellar. Most of the vessels found had W.T. Copeland maker's marks. Therefore, the variety and elaborateness of the vessels indicated that the inhabitants of the post in the late 1840s and early 50s were enjoying a lifestyle which was more than bare existence and included some luxuries.

The presence, quantity, dates and variety of vessels found indicated that the main activities associated with food preparation and consumption were concentrated in three centres towards the end of the post's operation: the kitchen; the factor's house and the North cellar. Food preparation activities and consumption would also have taken place in earlier structures. Due to the concentration of excavations on later structures, and possibly the abandonment and cleaning of earlier structures such as the men's house, the evidence is not conclusive in this regard.

In the foundation, palisade trenches and early blacksmith shop, a large number of ceramics was found in a great variety of patterns, with only a few pieces of each pattern represented. This would indicate cleaning activities taking place at the post and the use of ceramics as fill.

### 5.2.1.2 Glassware and Bottles

The majority of glass remains found at Fort Pelly 1 consist of various colours and portions of bottles or tableware, a number of which have been partially or completely reconstructed. The variety of glass items found represent a number of activities and recreations at the post.

Pharmaceutical bottles are the best represented, especially Turlington's Balsam of Life, Essence of Peppermint and Perry Davis Pain Killer, which are found in relatively equal numbers. The presence of large numbers of Turlington's Balsam of Life and Essence of Peppermint remains is not unique, as these were constantly being ordered and received by the dozens at the post. However, the numbers of these remains do not realistically reflect the numbers ordered and received. This suggests that they were being traded and sold outside the post. References of trading and administering medicines to the Indians are present (Johnson 1967:25; Lamb 1957:182). These two patent medicines are widely distributed and used during the fur trade period.

Remains of Turlington's Balsam of Life bottles have also been found at Francois-Finlay Post (1768-1773) (Kehoe 1978:70); Sturgeon Fort (1776-1780) (Barka 1976:76); Buckingham House (1792-1800) and Fort White Earth (1810-1813) (Nicks 1969:169, 218). Essence of Peppermint bottles have been recorded at Fort Pitt (pers. comm. Wilson-Meyer).

Remains of Perry Davis Pain Killer bottles suggest trade and acquisiton of trade goods from outside suppliers, perhaps the Red River District or the petty traders. Perry Davis Pain Killer is not listed in the account journals of Fort Pelly 1 as are Turlington's Balsam of Life and Essence of Peppermint. Since the patent date for Perry Davis Pain Killer is 1840, its presence in large quantities at Fort Pelly 1 suggests that the traders were acquiring goods within a relatively short time of their introduction. Perry Davis Pain Killer bottles are found at a variety of sites (Hudson's Bay Company posts, North West Mounted Police posts, etc.).

The presence of the wine bottle, the decanter and the stemware indicate a degree of luxury being enjoyed, probably by higher status individuals, at the post.

The glass articles, bottles, toiletry, and glassware, were concentrated in the kitchen area, with relatively few items found in the store, warehouse or factor's house. The low numbers of glass articles in these later features suggests that the kitchen was the main repository for glass items and a supply of pharmaceuticals and toiletry was kept here as well.

### 5.2.2 Personal Artifacts

#### 5.2.2.1 Pipes

White clay fragments constitute the majority of pipe fragments found at Fort Pelly 1. The main supplier represented is the Ford Firm of Stepney, who were suppliers of clay pipes to the Hudson's Bay Company from 1831 to 1870. Pipe fragments bearing their initials "IF" have been found at various other Hudson's Bay Company posts such as Fort Carlton, Fort Pitt, York Factory, which were in operation in the mid-late 1800s. The bowls of these pipes were not decorated, except for two bowl fragments which had the maker's mark present and the one bowl with a leaf/vine design along the seams.

Pipe bowls decorated in the "rib and leaf/vine" design bear the initials "TB", which could belong to a number of manufacturers. They most likely were made by establishments in London, either Thomas Balme or Timothy Berrington. Pipes bearing these initials and the decorated bowl were found at York Factory (Marg Burnip, pers. comm.), from which Fort Pelly received their "sundries". At For Pelly 1, a large number of these pipes were found next to the north palisade, west of the main activity areas.

Only one effigy pipe bowl, typical of the nineteenth century, was found at Fort Pelly 1 in the factor's house.

Many of the pipe stems had been reworked, at times to within a few millimeters of the bowl, suggesting that pipes were not always readily available or obtainable, and therefore, were not discarded until absolutely necessary. On a few pipe stem fragments, traces of a red stain were present. Walker (1971:31) notes that in the 19th century, varnish, glaze or wax was applied to the mouthpiece in order to prevent the smoker's lips from adhering to the porous clay.

Pipes made of various other materials in a number of different styles were also found. These included stub-stemmed clay and earthenware pipes made in the United States, the porcelain stub-stemmed pipes made in Germany and the "Micmac" pipes. These pipes may represent: those acquired by the Indians who frequently visited and traded at the American posts as well as at Fort Pelly 1; those obtained from the Red River District which had access to larger centres in the United States; pipe-making activities at the post, especially of "Micmac" pipes; or a combination of the above.

The presence and quality of pipe fragments recovered indicate that the main centres in which smoking took place were the factor's house, the store, the warehouse and the kitchen, in that order. Since a number of female related activities were centred in the kitchen, the large number of pipe fragments found in this feature would suggest that the women at the post enjoyed the habit of smoking tobacco. Van Kirk (1980: 102) notes that Metis women were often portrayed holding "elegant, longstemmed clay pipes."

Smoking may also have taken place in earlier structures, such as the men's house, the stable and the early blacksmith shop. However, only a small number of pipe fragments were recovered from these features. This discrepancy may be due to little excavation in these areas; the early occupation of this area in the post by a few individuals before the expansion of the post and its population in the 1830s; or both of the above.

Pipe fragments were scattered throughout building foundations and in the early and later palisade, as part of the fill. The largest concentration of pipe fragments occurred in the western extension of the north palisade in Sq. 40R03. It would appear that this area represents a major refuse deposit used by the inhabitants of the post.

#### 5.2.2.2 Jewelry

The distribution of the jewelry was concentrated in three main structures: the warehouse, the store and the kitchen. The necklace, yellow metal finger rings and pocket watch that were found in the warehouse and those items of jewelry found in the store, would represent articles for trade or sale. The number of jewelry items found, especially the finger rings, do not realistically reflect the number received at the post. In the account books "brass finger rings" are continually being ordered and received by the gross. For example, in 1826, six gross "brass finger rings" were received (HBCA, PAM, B. 159/d/7, fo. 6). The jewelry found in the kitchen, however, would suggest articles lost by the women working there. The Metis women were very fond of jewelry, especially necklaces, earrings and rings (Van Kirk 1980:102).

### 5.2.3 Clothing

#### 5.2.3.1 Buttons

Of the variety of buttons recovered, the majority consisted of metal buttons. Metal buttons were ordered and received in large quantities. For example, in the 1827-28 season, six dozen "Gilt Coat Buttons" were received at the post, and in 1844 "4 Gro. met. Coat Buttons" were requisitioned (HBCA, PAM, B. 159/d/7, fo. 10; B. 159/d/37a, fo. 2). The numbers found at the post fall short of those recorded in the accounts and suggest that they were a desired item of trade. In 1830, along with other assorted goods, two gross of buttons were sent out to the interpreters to trade to the Indians (HBCA, PAM, B. 159/a/12, fo. 13d). The buttons found in the factor's house and the kitchen which included the metal hunting buttons would represent those for personal use or lost items and were found in areas where mending or sewing activities occurred.

### 5.2.3.2 Sewing Equipment

Distribution of the sewing items indicates that sewing activities were concentrated mainly in the factor's house and the north cellar, both of which were residential structures. Although sewing activities may have taken place in the warehouse and the store, the items present in these structures most likely represent stock for trade or sale.

The scattered distribution of hooks and eyes throughout the post indicates items lost rather than the presence of a specific activity area.

### 5.2.3.3 Shoes

The number of shoe parts found at Fort Pelly 1 is not large, but in the sample, three methods of manufacture which indicate various time periods were observed. The majority of the shoes were manufactured by the first method, the outsole attached to the upper by nails, which was the common manufacturing process until the mid to late 19th century. Therefore, a larger number of shoes thus produced would be expected at the post. Shoes manufactured by the second and third methods, where machine stitching was partially or completely employed, date from the mid to late 19th century. The presence of these shoe manufacturing methods in the North cellar would indicate that the building was occupied in the later part of the post's existence and into the 1860s, well after the post's abandonment. Also, it is likely that the shoes were made in the United States where the shoe industry was fast expanding due to new innovations. Because of Fort Pelly's location and its interaction with the Red River settlement which had easy access to the United States, this would not be unique. The two adult shoes plus the number of children's shoes found here would suggest occupation of the structure by a family. Probably this was one of the servant quarters mentioned by the Earl of Southesk (1859:322).

### 5.2.4 Hunting and Subsistence

The majority of gun parts recovered at Fort Pelly are similar to the general description of the "Northwest Gun" provided by Hanson (1955: 2).

> The most apparent trade-mark of the Northwest Gun is the side-screw plate of cast brass in the form

> of a sea serpent, or, as some collectors interpret it, a dragon. The type is always full-stocked with a flat brass butt plate and a light iron trigger guard with a large bow. The barrel is part octagon, nearly always 24 gauge (about .58 caliber), and smoothbored for using either shot or a 30 guage patched ball. Ramrod guides are of ribbed brass. The guns are light and range from forty-six to sixty-four inches in length. Further and most positive identification can be made by the presence of a small die-stamp of a sitting fox on the lock, barrel or butt stock.

Unfortunately, many of the pieces found were extremely corroded and positive identification of maker's marks, except for one, dates or the small die-stamp of a sitting fox were not possible. Principle suppliers of Northwest trade guns to the Hudson's Bay Company during the Fort Pelly period include: (1) William Wilson and Co., suppliers from 1820 to 1824 inclusive and from 1826 to 1833 inclusive; (2) Edward Bond, supplier from 1820 to 1832 inclusive; (3) Thomas Burnett and Sons, suppliers from 1821 to 1860 inclusive; and (4) William Parker, supplier from 1837 to 1855 inclusive (Hanson 1955:18). The one mark present, however, does not belong to the firms listed as suppliers to the HBC, but to "W Chance & Son" who supplied guns to the United States in the mid 1800s. The presence of this mark in the North cellar would suggest that the inhabitants of this structure were receiving American goods, either directly from the United States, or via the Red River Settlement.

Exceptions to the typical "Northwest Gun" supplied by the Hudson's Bay Company to the posts, is the presence of a yellow metal trigger guard and a ferrous metal butt plate. The yellow metal trigger guard was found in the men's house along with the complete yellow metal serpent side plate and possibly indicates a degree of status of one of the men. The ferrous metal butt plate was found in the foundation of the warehouse and may represent one fashioned by the local blacksmith and later discarded. In the journals, the blacksmith is noted as "reparing Guns for the Indians" and "repairing an old Gun for an Indian" (HBCA, B. 159/a/10, fo. 20d; B. 159/a/18, fo. 22). Remains in the blacksmith shop consisted of a number of lockplates from which all useable parts, such as springs, frizzens, jaws, etc., were stripped. Also, a number of lock parts were found here.

Next to the blacksmith shop, the greatest number and variety of gun parts and associated items were recovered in the kitchen and in the factor's house. A few items were recovered scattered throughout the trading store and the warehouse.

This distribution is indicative of the fact that guns and their accessories were a prized and important item of trade and, therefore, would not be found in great quantities in the warehouse or trading store. Guns were ordered by the case along with bags of ball and shot, gross of gunworms and bags of mixed gunflints throughout the post's existence (HBCA, PAM, B. 159/d/15, fos. 5d, 9).

Gunflints are representative of the blade flints being produced in England in the 19th century. The largest quantities of gunflints were found in the warehouse and the trading store. A small number was found in the kitchen and the factor's house, with the rest being scattered throughout the post.

Percussion caps, which were introduced in North America in the later part of the 19th century, were restricted mainly to the trading store.

Lead shot was recovered in a number of sizes, but the most common was the 4 mm and 4.5 mm shot. These sizes were found mainly in the store and scattered throughout the warehouse, with the largest concentration in the north cellar of this structure.

As ball and shot were ordered in bags, and since no size was specified, the recovery of large numbers of these two particular sizes (4 mm and 4.5 mm) may reflect those not preferred or used for the type of game being hunted in the area. Alternately, they may represent the most common size and, therefore, the most likely to be lost or misplaced.

The distribution of the musket balls was similar to that of the lead shot.

Comparison of the number of gun parts and associated items recovered at Fort Pelly with the historic documents available reveals that the specimens found do not realistically reflect the numbers that were ordered, received and traded by the post. This could be attributed to the fact that guns were a major item of trade and, therefore, would not be retained at the post. Those few gun items found would represent discarded unuseable or lost parts.

### 5.2.5 Trade Goods

#### 5.2.5.1 Beads

Beads recovered at Fort Pelly 1 are generally representative of the 19th century. The majority of beads recovered consist of seed beeds with relatively few "necklace" beads represented. The numbers of beads found are small in comparison to the amounts being ordered. For example, the requisition for 1844 alone includes: 60 bunches white agate beads 100 bunches white barleycorn beads, 40 lbs. common light blue beads, 40 lbs. fine light blue beads and 40 lbs. fine white enamel beads (HBCA, PAM, B. 159/d/37a, fo. 2). However, this low recovery is not surprising as beads were ordered explicitly for trade and those found at the post, especially in the kitchen, factor's house, palisades, and areas of the warehouse, represent lost personal items. The largest concentration of beads, especially seed beads, was recovered from the warehouse and the store. In the warehouse, these seed beads were distributed throughout, with the largest concentration occurring in the north cellar, where an embroidered article of clothing had rotted, leaving only the beads in the applied pattern. The large number of seed beads in the store may represent those that were left behind or forgotten as trading interactions would be conducted here, rather than items from lost clothing, etc.

The two predominant colours found in the warehouse and store were white and shadow blue. These colours appear to be the favoured ones, as they constantly appear in the inventory and requisition accounts of the post (HBCA, PAM, B. 159/d/37b, fo. 2; B. 159/d/7, fo. 10; B. 159/d/37a, fo. 5d; B. 159/d/15, fo. 4d; B. 159/d/2b, fo. 1).

Other colours that appear in large quantities include transparent, rose wine, redwood, teal green, cinnamon, light cherry rose and dark palm green. The colours red and yellow are specifically referred to in one account (HBCA, PAM, B. 159/d/2b, fo. 1), and may suggest a preference for these two colours in addition to white and blue. The presence of large numbers of the other colours may indicate either a preference for these colours by the Indians, or alternately, those colours not preferred by them.

### 5.2.6 Architectural

A variety of items employed in the construction of buildings were found. The numbers of most, such as hinges, door lock parts, were small, except for the nails which represented the largest category found on the site. Both hand wrought nails, which constituted the majority, and machine stamped nails were present. This would be expected, considering the time period of the post's occupation (1824-56). The large number of hand wrought nails as opposed to machine stamped would indicate that the latter were not that easily obtainable. In fact, references to the blacksmith making nails were recorded in 1826, 1829, 1830 and 1853. In 1826, supplies were short and the blacksmith was making nails out of old axes "he for want of better material" (HBCA, PAM, B. 159/a/9, fo. 37).

The remaining architectural items were restricted to four structures: the kitchen, the factor's house, the warehouse and the early blacksmith shop. Items in the first three would represent those used in the actual structure, while those in the early blacksmith shop would represent unuseable, discarded items.

The majority of these items were also fashioned at the post, and a number are extremely crude in appearance and form. Reference is made in 1844 of the blacksmith making hinges for the fort gates, and in 1854 for the factor's house (HBCA, PAM, B. 159/a/18, fo. 61; Cummings' Journal, March 18, 1844).

### 5.2.7 Work Activities

Items found in this category indicate a large and varied group of activities taking place at the post. Many of these activities, such as gardening and boat building, and associated artifacts, such as firmer chisels for boats, are mentioned in the post journals and account books (HBCA, PAM, B. 159/d/37a, fo. 2d). A large number of these items, in addition to being ordered, were manufactured at the post by the blacksmith. For example, the blacksmith is mentioned making a plough for gardening and axes for trade (HBCA, PAM, B. 159/a/18, fos. 14, 29). References to the manufacture of axes at the post are numerous, and since large quantities were constantly being ordered and received by the post, it would appear that this was a desired item by the Indians. The blacksmith is also recorded as "making scrapers for the Indians" and although it is not indicated whether these were of bone or metal, the latter is more probable (HBCA, PAM, B. 159/a/18, fo. 30).

In addition to axes, other items being ordered in large quantities for trade purposes included: awls, "brass" wire; knives, fire steels (strike-a-lights), vermilion; and files (HBCA, PAM, B. 159/d/7, fo. 5d; B. 159/a/12, fos. 7, 13d, 23d).

In comparison to the amounts of the various items listed as being ordered and received, the numbers found at Fort Pelly 1 were low, and certain artifacts such as planes were not represented. This may be due to the fact that: the entire post was not excavated; many items were traded; and useable items would have been moved when the post was abandoned.

The items found at the site would represent those broken or discarded, especially the ones in the early blacksmith shop and palisades, and personal items employed by the people. Snow shoe netting needles were found in the kitchen and the factor's house, and the two complete bone fleshers were found in the men's house with fragments recovered in the kitchen and the factor's house. One metal scraper was also found in the factor's house. Activities, therefore, appear to be centered in the men's house, the kitchen and the factor's house, and especially in these later two structures.

### 5.2.8 Concluding Statement

The analysis and distribution of the various artifact classes provides information regarding suppliers, activity areas, and social and economic stratification. Evidence for certain events, such as the fire of 1843, was also found. Conclusions based on the artifact analysis and distributions in conjunction with the historical documentation and structural information provided by the archaeological investigations are presented in the next chapter.

## CHAPTER SIX

# CONCLUSIONS

Analysis of the structural remains and artifactual data in conjunction with historic sources have provided information regarding the hypotheses previously formulated. The results will be discussed with respect to the proposed hypotheses which will be stated more briefly.

Hypothesis 1: That according to George Simpson in 1832, Fort Pelly 1 was a large and "embellished" post and that this should be reflected in journal references regarding the building of structures and expansion and in the structural remains recovered during archaeological investigations.

Fort Pelly 1 was established by Allan McDonell in 1824 as a small temporary post. The description of the various structures provided in his journals attest to this fact. Excavations revealed only a few of stable, the men's house, and portions of the northeast, and south palisades. A number of the features found, which included the trading store, the kitchen, the factor's house, and later palisades were built in the late 20s and early 30s, when the post was undergoing major expansion. The building of the large warehouse took place after the fire of 1843, and is mentioned in Cummings' journal (1844), and is also present in the photograph of the post in the 1850s (Fig. 21). The excavations along with the post journals substantiate Simpson's criticism regarding the post's expansion and numerous "fanciful improvements" (HBCA, PAM, D. 4/99, fo. 47d).

Hypothesis 2: That the principal part of the post was destroyed by fire in 1843 and that evidence of burning should be present in a number of structural features and on artifacts.

Evidence of the 1843 fire was found in the foundations of a number of earlier structures and features such as the palisades and in the warehouse area. Burning was evident on large numbers of ceramics and glass recovered in these areas.

Hypothesis 3: That with the enlargement of the post, an increase in the number of personnel would be expected along with social and class distinctions, that would be reflected in the artifactual material, such as ceramics, bottles, etc.

Personnel at the post did increase throughout its existence with the majority of the servant class being of Metis extraction and the clerks and chief factors and traders of European origin. Status differences, therefore, would be expected between the chief factor and the servants, especially with the quantity and variety of artifactual material recovered. However, this was not readily discernable through the artifact data, especially for the early period of the post. For the later period, the variety and elaborateness of the ceramic vessels and the glassware indicated that the inhabitants, in general, in the 1840s and 50s, were enjoying a lifestyle above the bare necessities of life. It should be noted that the planned abandonment of the post and its continued use by the servants would affect evidence regarding social and status differences which may have existed previously.

Hypothesis 4: That with the increase of personnel at the post, preferences for certain goods or overseas suppliers may have existed and, if so, be noted in the post's account books or reflected in the artifactual material.

Individual preference for various items were minimal and restricted to those goods which were supplied through the HBC. This is especially evident with the ceramics, manufactured by Copeland and white clay pipes produced by Fort of Stepney. Both firms were principal suppliers of the HBC in the 19th century. If a preference for certain goods existed, these would have to be obtained locally from the Red River Settlement or the United States.

Hypothesis 5: That if shortages of various goods were experienced at the post, certain items would be either manufactured at the post or locally acquired and would be present in the artifactual data.

Basically, the items manufactured at the post consisted of hardware articles, such as hoe blades, hinges, pintles, hooks and eyes, etc. that would be made by the resident blacksmith. A number of the articles had been re-fashioned from scraps and various broken articles, such as the awl made from a piece of yellow metal.

Items, especially ceramics, were obtained locally from the Red River Settlement which had access to markets in Eastern Canada and the United States.

Hypothesis 6: That due to Fort Pelly's close proximity to the Red River Settlement and the United States, a number of American goods, such as pipes, guns, etc., would be expected.

Contacts between Fort Pelly I and the Red River Settlement were numerous, especially in the 40s and 50s when the post was under the necessity of employing most of its servants from the settlement. These servants, as well as petty traders who frequented the Pelly area, had easy access to American goods via the settlement. Items reflecting goods obtained from American markets were present at Fort Pelly 1 and included pipes, shoes and guns.

Hypothesis 7: That classes of artifacts and their distribution may be generally accepted as indicating the function of a structure and the activities occurring there.

The functional designations for the various structures were basically derived from the artifact material recovered within. Items found in the warehouse and the trading store were mainly comprised of trade good items, while those in the kitchen, factor's house and north cellar consisted of household and personal goods.

The distribution of the artifact classes throughout the different features indicated various activity areas and disposal practices. The kitchen appeared to be the focal point for female-related activities, such as cooking, mending and repairing of snow shoes, etc. These activities also occurred in the factor's house and the north cellar. The variety of various household and personal items found in the north cellar suggested that this was a single family unit, occupied in the late 1850s and early 1860s by servants who remained at the old post. Refuse was discarded in two main areas: the early blacksmith shop, and in square 40R03, next to the western extension of the north palisade. References are found throughout the journals regarding the cleaning up of the post. In addition to these two main areas, refuse was also used as fill in foundation and palisade trenches.

Hypothesis 8: That as noted by Praeger (1980) discrepancies arise between the number of trade goods in an archaeological assemblage and the accounts, because of the post's main function to trade goods and, therefore, this would be expected at Fort Pelly 1, it being a major trading centre.

The majority of items found at Fort Pelly 1 consisted of household and personal goods. These were concentrated in three main centres: the kitchen, the factor's house and the north cellar, with large numbers of personal items also occurring in the warehouse and the store. Trade goods were found in substantially low quantities in comparison to the numbers listed in the account books and were basically restricted to the warehouse and trading store.

Hypothesis 9: That since the abandonment of Fort Pelly 1 in 1856, was planned and the distance to the new post was short, certain cultural formation processes, such as accumulated refuse in house interiors and number and condition of artifacts left behind, associated with abandonment would be evident.

In 1856 the post was partially abandoned. Although the majority of people moved to the new site, a number of servants continued to occupy dwellings in the old post. Therefore, the archaeological assemblage largely represents either those items used by these servants or lost and discarded broken items. The useable goods would have been moved to the new site. Refuse associated with the planned abandonment of the post was evident only in the top 30 cm of the cellar in the trading store.

In conclusion, the structural, artifactual and historic data reveal that Fort Pelly 1 was a major centre of social and cultural interaction in the Swan River District in the first half of the 19th century, with the inhabitants of the post enjoying a comfortable lifestyle.

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## APPENDIX 1

## HOUSEHOLD ARTIFACTS

### 1.1 Ceramics

Ceramics constitute one of the largest and most varied groups of artifacts recovered from Fort Pelly 1. Analysis of the ceramics focuses on ware type, decorative techniques, identification and dating of patterns (where possible), various marks and vessel shape (if possible). With respect to the terms used in this discussion to describe the various identifiable vessel portions, see Fig. 49. Detailed descriptions of paste and manufacture of the individual wares is not dealt with here as terms such as porcelain, earthenware, etc. are accepted as designating a particular kind of paste, ware, etc.

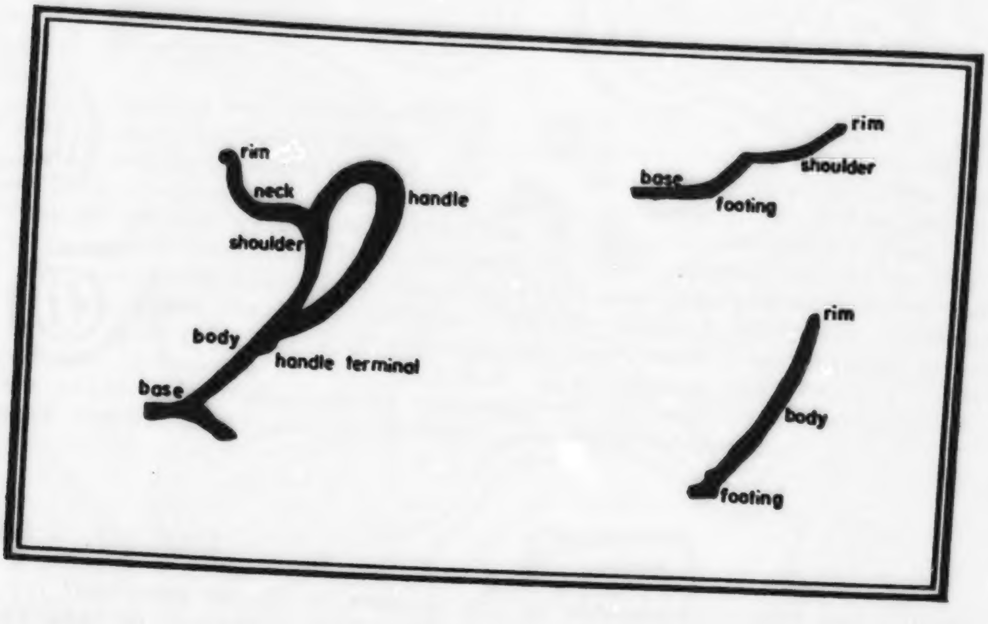

rim
neck
handle
shoulder
body
handle terminal
base
rim
base
shoulder
footing
rim
body
footing

Figure 49. Identifiable ceramic vessel portions.

The wares in common use in England during the 19th century, which were found at Fort Pelly 1 include: creamware (1760-c.1820) - a creamy white fabric covered with a thin lead, yellowish glaze (Hughes 1956: 55; Donnell 1978:35), usually associated with overglaze transfer printing; pearlware (1780-c.1830) - a creamy white fabric with a blue or greenish-blue tint (Hughes 1956:121; Noel-Hume 1978b:43), and painted underglaze decoration; white earthenware (c.1825 - present) - a porous paste, covered by a colourless or slightly blue tinged glaze either lead or later borosilicate, with various types of decoration; bone china (c.1805 - present) - translucent porcelain more cream-coloured and less glossy, commonly associated with overglaze painting; continental porcelain - a hard paste, dead white and translucent with overglaze decoration, popular in North America during the second half of the 19th century; ironstone - a hard earthenware, slightly transparent, with ironstone slag content making it compact, durable and of great strength, popular in the last half of the 19th century; stoneware - a coarse, dense glazed (salt or lead) or unglazed clay, more vitrified and denser than earthenware. A total of 4373 ceramic sherds were analyzed, of which the majority (95%) consisted of white earthenware (Table 6).

### 1.1.1 Creamware

Creamware was introduced in Britain during the first half of the 18th century by Thomas Astbury and Enoch Booth (Hughes 1961:104-107). Josiah Wedgewood experimented with this ware during the mid 1700s and by 1760 produced an improved high-quality creamware, which reached its peak of popularity between 1770-1790 (Hughes 1961:104-107). Decorative techniques associated with creamware included, moulded relief at the rims, overglaze transfer print, overglaze and underglaze painting and blue and green shell edge (Hughes 1956:56; Donnell 1978:34). Although declining in popularity, creamware continued to be manufactured throughout the 19th century. Six fragments were found at Fort Pelly 1. These are plain undecorated sherds representing various vessel parts: four body sherds, one footring fragment, one basal fragment.

### 1.1.2 Pearlware

Pearlware was first made by Josiah Wedgewood in 1779 and reached its peak in the early 19th century, at which time it was being made by other potters (Hughes 1956:121). Decorative techniques used included blue or green shell edge, blue underglaze transfer print, polychrome painted underglaze, painted overglaze enamels and blue painted underglaze (Noel-Hume 1978b:42-49; Hughes 1956:121). Around 1820-30, pearlware was being replaced in popularity by refined earthenware. Fourteen sherds and one plate (reconstructed from 24 pieces) of pearlware decorated in blue underglaze transfer print were recovered at Fort Pelly 1. The fourteen sherds include: four rim portions; five neck/shoulder/body

## TABLE 6

Ceramic Ware Type by Decorative Technique

| Ware Type / Decorative Technique | Creamware | Pearlware | Bone China | White Earthenware | Porcelain | Ironstone | Coarse Stoneware |
|---|---|---|---|---|---|---|---|
| Plain | 6 | | | 1040 | 7 | 5 | 144 |
| Moulded Relief | | | | 3 | | 19 | 3 |
| Underglaze Hand Painted | | | | 8 | | | |
| Overglaze Hand Painted | | | | | 7 | | |
| Underglaze Transfer Print | | 38 | 2 | 2887 | | | |
| Overglaze Transfer Print | | | | | | | |
| Underglaze Transfer Print and Overglaze Hand Paint | | | 6 | 29 | 1 | | |
| Stamped | | | | 33 | | | |
| Sponged | | | | 57 | | | |
| Underglaze Transfer Print and Underglaze Banded | | | | 5 | | | |
| Underglaze Banded | | | | 26 | 1 | | |
| Underglaze Edge Decoration | | | | 10 | | | |
| Underglaze banded and stamped | 1 | | | 34 | | | |
| Moulded Relief and Underglaze Transfer Print | | | | 2 | | | |

sherds; one basal fragment; and four body sherds. The plate measures 10½ inches and has the mark "SEMI-CHINA" printed on the back.
WARRANTED

### 1.1.3 Bone China

Bone china was first marketed in the 1790s by Josiah Spode. It consisted of a soft paste containing calcinated bone (Bemrose 1952:26; Hughes 1956:23). Bone china was perfected in the early 19th century and by 1818 was being manufactured by at least 22 firms (Bemrose 1952: 26; Hughes 1956:24). This ware was mainly used for teaware and decorative pieces and rarely for dinnerware. Decorative techniques employed included: transfer print, overglaze painting and gilding. Seven pieces of bone china were recovered from Fort Pelly 1. Two pieces fit together to form the rim and body of a small saucer which is decorated in green underglaze transfer print in a Copeland pattern designated only as 7663. This pattern was first introduced around 1842 and continued until after 1847 (Sussman 1979:207). The five remaining pieces belong to a bowl which is partially reconstructed. Decoration is elaborate, including underglaze transfer print in blue, red, pink and green, with yellow/gold hand painting applied over the glaze, in the Copeland pattern known as Ship Border.

### 1.1.4 White Earthenware

The white earthenware recovered at Fort Pelly 1 consists of a large number of undecorated or plain white sherds, while the rest are decorated by a variety of methods, the most common being underglaze transfer printed (Table 6). Transfer printed earthenware, especially by Copeland, represent the most common type used at Fort Pelly 1. The Copeland Company was the main supplier of white earthenware to the HBC from 1835 until the 20th century (Sussman 1979:9). Their contract continued through the company's ownership and name changes: Copeland and Garrett, until 1847; W.T. Copeland, 1847 to 1867; and W.T. Copeland and Sons, 1867 to the end of the contract (Sussman 1979:9). The company specialized in making good quality tableware and toiletware of white earthenware which is decorated in underglaze transfer print (Sussman 1979:10).

Transfer printing was invented in England and first used in Battersea in 1753. In the 1780s, Josiah Spode was making improvements in earthenware manufacture and the use of underglaze transfer printing on this ware type. Spode introduced patterns in a variety of styles, with oriental and continental influences, which provided a change from the sparsely decorated creamware of the preceding period (Lewis 1969: 143). The earlier blue and white transfer print wares were bought by the professional class. However, mass production began around 1800 and the wares became less expensive and within the reach of more people. Blue transfer printed ware was especially popular after 1820 (Lewis 1969:143). Various shades of blue were used in underglaze transfer printing until 1828, "when it was discovered that by mixing finely powdered yellow, green, red and black enamels with barbados tar, it was possible to transfer designs in various shades of these colours without distortion or loss of brilliance" (Hughes 1961:129). However, a separate firing was needed after each colour was applied, lengthening the time required to finish the plate and it was not until 1848 that a process was discovered in which the three colours, blue, red and yellow could be fixed from a single transfer with a single firing (Hughes 1961:130).

## Spode/Copeland Transfer Printed Earthenware

Spode/Copeland transfer printed earthenware has been found in great quantities at various HBC sites. Various patterns produced by this company and the dates of their introduction have been studied and outlined in great detail by Sussman (1979). The names cited for the patterns in Sussman's catalogue are those found in the Spode/Copeland factory pattern books, and company catalogues; engraved on copper plates; or found printed on various pieces. The dates listed for the pattern include the date that the pattern was introduced and "the latest date for which there is evidence the pattern was considered useable by the factory" (Sussman 1979:10). In the course of her research, Sussman examined Spode/Copeland ceramics from 20 HBC posts, including Fort Pelly 1. She identified 33 various Spode/Copeland patterns present at the post. This initial identification of the Spode/Copeland patterns by Sussman provided the basis from which the present research was conducted. Table 7 lists the Spode/Copeland pattern names and their dates, and the number of sherds for each. Table 8 gives the breakdown of the patterns by identifiable portion. An additional four patterns were found and identified and added to the 33 listed by Sussman.

## Spode/Copeland Marks

The Spode/Copeland Company experienced a number of ownership changes throughout its association with the HBC, which was reflected in the various identifying "maker's mark" employed on the ceramics. For a detailed history of the Spode/Copeland Company, refer to Sussman (1979) and Whiter (1970). The various Spode/Copeland marks found at Fort Pelly 1 (Fig. 50) may be divided into two periods: (1) those belonging to Copeland and Garrett (1833-47) and (2) those belonging to W.T. Copeland and Sons (1847-67) (Godden 1964:171). The majority (94%) belong to W.T. Copeland and Sons and consist of: (1) "Copeland Late Spode" printed in colours of red, green, blue or mauve or impressed, or impressed and painted: (2) "COPELAND" printed in blue. Four different printed Copeland and Garrett marks were recorded (Fig. 50). The word "NEW" in Fig. 50b would have been followed by the term "BLANCHE" or "FAYENCE" below it, which refers to the body of the ware, as does the

TABLE 7

Spode/Copeland Patterns

| Spode/Copeland Pattern Name | Date | Quantity |
|---|---|---|
| Aesop's Fables | c. 1830-post-1879 | 15 |
| Alhambra | 1848-post-1882 | 143 |
| Arabesque | c. 1835-post-1882 | 12 |
| Athenian | c. 1837- | 7 |
| British Flowers | c. 1829-1974 | 83 |
| Broseley | c. 1818-post-1847 | 100 |
| B700 | c. 1838-post-1847 | 204 |
| B772 | c. 1839-post-1882 | 201 |
| Byron Groups | post 1833 | 61 |
| Camilla | c. 1833-present | 20 |
| Clustre | | 2 |
| Continental Views | 1845-post-1882 | 148 |
| Flower Vase | c. 1828-20th century | 218 |
| French (radiating springs) | post-1833-post-1847 | 3 |
| Fruit and Flowers | c. 1826-20th century | 23 |
| Geranium | c. 1818-20th century | 23 |
| Grapevine | post-1847- | 2 |
| Honeysuckle | c. 1855-post-1868 | 1 |
| Italian | c. 1816-present | 8 |
| Lanjelijsen | pre-1833 | 2 |
| Lily | c. 1837-20th century | 66 |
| Lotus | 1850- | 58 |
| Macaw | c. 1838-post-1872 | 6 |
| Pagoda | c. 1833-post-1872 | 31 |
| Pergola | c. 1844-post-1868 | 6 |
| Portland Vase | c. 1831-post-1833 | 34 |
| Raphalesque | 1845-post-1872 | 9 |
| Rose Wreath | 1847-post-1870 | 6 |
| Ruins | 1848-20th century | 58 |
| Rural Scenes | 1850-20th century | 18 |
| Ship Border | c. 1820-1910 (bone china) | 2 |
| Star | pre 1867 | 14 |
| Statice | 1844- | 8 |
| Strawberry | 1825-20th century | 41 |
| Tower | c. 1819-present | 8 |
| Watteau | pre-1847-post-1861 | 45 |
| Wellington | c. 1839- | 14 |
| 7663 | c. 1842-post-1847 (not earthenware but bone china) | 1 |
| Unidentified* | | 464 |

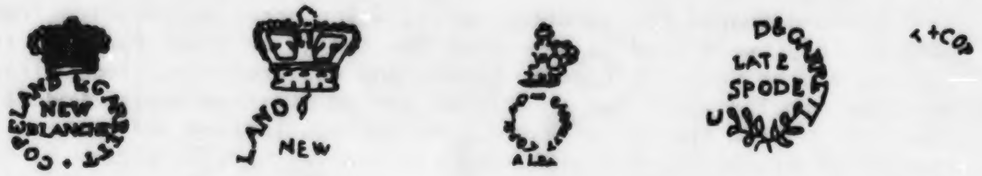
*Unidentified refers to fragments which are extremely small and/or burnt and preclude identification

TABLE 8

Spode/Copeland Patterns by Identifiable Portions

| Spode/Copeland Patterning | Rim | Spout | Pouring Lip | Neck/Shoulder/ Body | Footring | Handle | Base | Base/Footring | Body | Rim/Body/ Base | Rim/Shoulder | Body/Base | Footring/ Body | Handle Terminal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aesop's Fables | 2 | | | | | | | | 13 | | | | | |
| Alhambra | 56 | 1 | | 2 | | 2 | 7 | 4 | 54 | 13 | | 3 | 1 | |
| Arabesque | 2 | | | | | | | | 10 | | | | | |
| Athenian | | | | | | | | 1 | 6 | | | | | |
| British Flowers | 41 | | | 3 | | | 6 | 1 | 31 | | 1 | | | |
| Broseley | 55 | | | | | | 3 | 4 | 33 | 4 | | | 1 | |
| B700 | 82 | | | 2 | | | 10 | 17 | 79 | 5 | 5 | | 4 | |
| B772 | 96 | | | | | 5 | 3 | 9 | 69 | 1 | 2 | 12 | 2 | 2 |
| Byron Groups | 13 | | | 3 | | | 6 | 5 | 33 | | | | 1 | |
| Camilla | 3 | | | 3 | | | 6 | | 7 | | 1 | | | |
| Clustre | | | | | | | | | 2 | | | | | |
| Continental Views | 68 | | | 7 | 1 | | 12 | 12 | 25 | 17 | 2 | 3 | 1 | |
| Flower Vase | 45 | | | 6 | 2 | | 9 | 8 | 144 | | | | 4 | |
| French Radiating Springs | | | | | | | | | 3 | | | | | |
| Fruit and Flowers | 1 | | | 6 | | | | | 16 | | | | | |
| Geranium | 16 | | | 1 | | | | | 5 | 1 | | | | |
| Grapevine | | | | | | | | | 2 | | | | | |
| Honeysuckle | 1 | | | | | | | | | | | | | |
| Italian | 3 | | | 1 | | | 1 | | 3 | | | | | |
| Lanjelijsen | 2 | | | | | | | | | | | | | |
| Lily | 14 | | | 5 | | 1 | 1 | 3 | 39 | 1 | 1 | | 1 | |
| Lotus | 16 | | | 2 | 1 | 2 | 5 | 1 | 27 | | 3 | 1 | | |
| Macaw | | | | | | | | | 6 | | | | | |
| Pagoda | 10 | | | 1 | | | | 1 | 18 | | | 1 | | |
| Pergola | 1 | | | | | | | 1 | 3 | | 1 | | | |
| Portland Vase | 8 | | | 5 | 1 | | 3 | 1 | 11 | 2 | 2 | 1 | | |
| Raphaelesque | 4 | | | | 1 | | | 2 | 2 | | | | | |
| Rose Wreath | 5 | | | | | | | | | 1 | | | | |
| Ruins | 11 | | | 2 | | | | 2 | 39 | 1 | 2 | | | 1 |
| Rural Scenes | 3 | | | | | | | | 13 | 1 | 1 | | | |
| Ship Border | | | | | | | | | | 2 | | | | |
| Star | 9 | | | | | 2 | | | 3 | | | | | |
| Statice | 3 | | | | | | | | 4 | | 1 | | | |
| Strawberry | 17 | | | 3 | | | | 1 | 19 | 1 | | | | |
| Tower | | 1 | | | | 1 | | | 5 | | | | | 1 |
| Watteau | 20 | | | 4 | | | 2 | 5 | 10 | 1 | 3 | | | |
| Wellington | 4 | | | | | | | | 10 | | | | | |
| Unidentifiable | 114 | 1 | | 1 | 18 | 2 | 1 | 18 | 30 | 263 | 4 | 5 | 1 | 6 |

Copeland and Garrett marks (1833-1847)


NEW
BLANCHE
NEW
LATE
SPODE

a Camilla

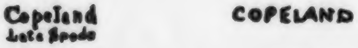
b

c Aseop's Fables (Brown)

d Fruit & Flowers (Blue)

e Fruit & Flowers (Blue)

W. T. Copeland (and Sons) marks (1847-67)


Copeland
Late Spode
COPELAND

f

g

| Green | Red | Blue |
|---|---|---|
| Ruins (1) | Lotus(1) | Alhambra (4) |
| B700 (1) | | • Brosley (1) |
| B772 (2) | | Continental Views (5) |
| • B772 (1) | | • Continental Views (1) |
| | | Lily (1) |
| | | Portland Vase (1) |
| | | Rose Wreath (1) |

• also has the name "Copeland" impressed

Figure 50. Spode/Copeland maker's marks found at Fort Pelly 1.

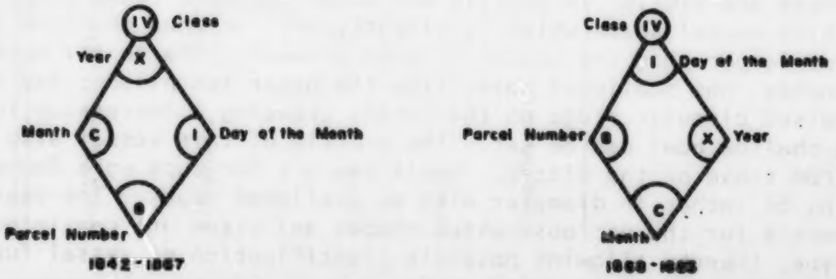

IV
Class
Year
X
Month
C
I
Day of the Month
8
Parcel Number
1842-1867
Class
IV
I
Day of the Month
Parcel Number
8
X
Year
C
Month
1868-1883

Figure 51. Registration Marks.

term "ALBA" in Fig. 50c (Sussman 1979:241).

## Registration Marks

Diamond shaped registration marks, which occur on ceramics from 1842 to 1883, were used to show that the design or shape had been registered at the Patent Office in London and was protected from "piracy" by other manufacturers for an initial period of three years (Godden 1964:526). With the aid of a key, the various letters and numbers in the corner of the diamond will show the earliest possible date of manufacture. The diamond mark was either printed or impressed. The letters and numbers were arranged in two different ways. From 1842-67, the year letter appears in the top panel, below the class number IV and from 1869-83, the year appears in the right-hand panel (Fig. 51). Sixteen of these registration marks have been found on the bases of partially and completely reconstructed vessels from Fort Pelly 1, and fall within the period 1842-1867. Of these sixteen registration marks, fifteen are printed in blue and one is printed in mauve. These are found on five different patterns whose names and the date of registration are listed in Table 9.

## Vessel Shapes (Spode/Copeland)

At Fort Pelly, complete and partial reconstruction of a number of vessels provided information on vessel size and shape. Such vessels consist mainly of dinnerware items -- plates, dishes and other attendant serving pieces. With regard to Spode/Copeland wares, Whiter (1970:122) states that dinnerware was the "preserve of earthenware and, later stone china" and that teawares in them are rare by comparison. Profiles and measurements of the various vessel shapes identified from completely or partially reconstructed Spode/Copeland vessels are illustrated in Fig. 52, with the name of the patterns in which it occurs and the number of specimens reconstructed for each shape. For a number of pieces in various patterns, a general identification of function (plate, saucer or bowl) is possible, but no specific measurements (nine inch or ten inch plate) are possible. These are listed at the end of the figure.

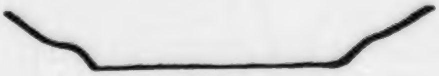
## Plates and Saucers

Two sizes of plates were found, ten inch and nine inch. Both of these are similar in profile and have scalloped edges (Fig. 52). A third vessel shape which is slightly smaller than the nine inch plate, but larger than the saucer is also present. The vessel measures 8½ inches, has scalloped edges like the other two plates, and has a raised circular ridge on the inside creating a depression into which a shallow bowl can be set. The profile of this vessel also differs from those of the plates. Small saucers for cups were found, measuring 6¼ inches in diameter with no scalloped edges. The base ring diameters for the various vessel shapes and sizes are consistent for each type, thereby allowing possible identification of vessel function on

## TABLE 9

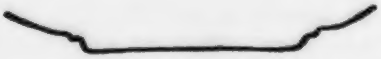
Spode/Copeland Patterns with Registration Marks

| Pattern Name | Date | Vessel & Number | | Pattern Colour | Registration Mark Colour |
|---|---|---|---|---|---|
| Continental Views | October 21, 1845 | bowl | 1 | flow blue | blue |
| | | plate | 4 | | |
| | | soup plate | 1 | | |
| Alhambra | June 30, 1848 | saucer | 4 | flow blue | blue |
| | | bowl | 1 | | |
| | | pitcher | 1 | | |
| | | mug | 1 | | |
| Ruins | September 15, 1848 | saucer | 1 | flow blue | blue |
| Lotus | December 20, 1850 | bowl | 1 | mauve | mauve |
| Rose Wreath | 1847 | saucer | 1 | blue | blue |



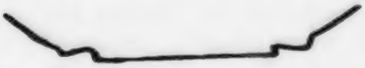
Scalloped edge
Base Ring Diameter - 5.5 inches

10 " plate — Continental Views (Flow Blue) - 2 complete
- 1 partial
- 1 rim only
Byron Views (rim portion)
Watteau (rim portion)



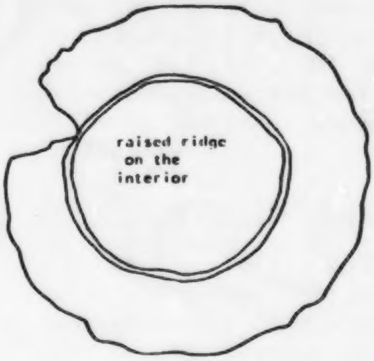
Scalloped edge
Base Ring Diameter - 4 3/4 inches

9 " plate — Portland Vase - 1 complete
Continental Views (Flow Blue) - 2 complete
Willow - 2 partially reconstructed fragments



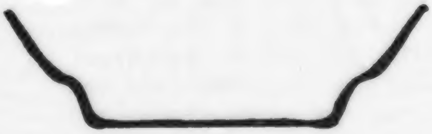
Scalloped edge
Base Ring Diameter - 4 3/8 inches

8 ½ " plate — Continental Views (Flow Blue) - 1 complete



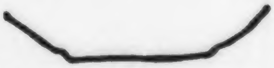
View of interior of 8 ½" plate

shallow bowl fits into the interior



Base Ring Diameter - 5 ¼ inches

10" serving dish — Camilla



Base Ring Diameter - 2 3/4 inches

6 ¼ " saucer — Alhambra - 4 complete
Ruins (blue) - 1 partially reconstructed fragment
Rose Wreath - 1 partially reconstructed fragment
Brosley - 1 partially reconstructed fragment
Watteau - 1 rim portion

Plates and Saucer Fragments

| | | |
|---|---|---|
| 8700 | | saucer |
| 8772 | | saucer (3) |
| British Flowers | | saucer |
| Camilla | plate and | saucer |
| Flower Vase | | saucer |
| Fruit and Flowers | plate and/or | saucer |
| Geranium | | saucer |
| Lily | plate and/or | saucer |
| Lotus | plate | |
| Raphaelesque | | saucer |
| Rural Scences | | saucer |
| Willow - (2 plates - 1 has repair holes) | plates | |
| 7663 - Bone China | | saucer |

Figure 52. Vessel Shapes of Spode/Copeland Plates, Saucers amd Serving Dish.

the basis of the base ring size alone. The serving dish measures 10 inches and has a deeper centre for containing food.

Bowls

Bowls were found in a number of sizes and shapes (Figs. 53, 54). The most common is a small round bowl which stands 2 3/4 inches in height and has a diameter of 5½ inches. The shallow bowls (Fig. 53) most likely belong together in a set with the saucer-like plates (Fig. 52) described above. For a number of the bowls only a partial profile is possible. Therefore, complete vessel shape or size cannot be given. Profiles of these bowls suggest a general "ball" shape (Whiter 1970), in a number of variations (Fig. 54). One such bowl decorated in red underglaze transfer print in the pattern "Rural Scenes" may have belonged to a set consisting of a buttertub and stand, as fragments of the same pattern and colour are found in the immediate location belonging to two different pieces -- the saucer or stand and possibly the lid. Decoration on the bowls occurs both on the outside and the inside of the vessel.

Mending is evident on the larger bowl, decorated in the "Continental Views" pattern. Holes have been drilled into the vessel in three places and metal clasps have been inserted to join the pieces together (Fig. 55). The pieces may have first been glued together before the holes and metal clasps were added, making the vessel suitable for liquids.

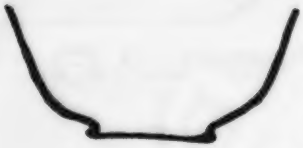
Cups, Mugs

A mug decorated in blue underglaze transfer print in the "Alhambra" pattern is completely reconstructed (Figs. 56, 57). The mug is 3½ inches high and has a diameter of 3 3/4 inches. The base has a diameter of 3½ inches with a Copeland name mark and a registration mark printed in blue.

A tea cup in blue underglaze transfer print in the "Lily" pattern is partially reconstructed. The shape of the cup is known as the "London Shape" which was the most commonly found Spode cup shape in china and which also was manufactured in earthenware (Whiter 1970:127). The shape was introduced ca. 1813 and had become the dominant shape by 1828 (Whiter 1970:127). The cup had been broken and repaired in a number of places (Fig. 57). Holes were drilled in the cup and metal clasps were inserted to hold the pieces together. These were probably glued first as well.

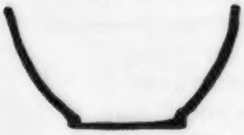
Pitcher

Two pitchers, one complete and one partial, were reconstructed. Both are octagonal in shape with the spout being an effigy of a bearded man's head wearing a hat done in relief (Figs. 56, 57). Both pitchers are decorated in blue underglaze transfer print. The complete



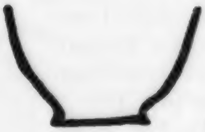
| | |
|---|---|
| Continental Views | 1 complete (mended) |

Height 3 inches
Diameter 6.5 inches
Base Ring Diameter 3 inches



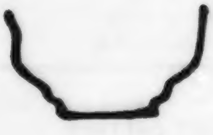
| | |
|---|---|
| Lily | 1 complete |
| Aesop's Fables | 1 partial |
| Ship Border | 1 partial |
| B700 | 1 partial |
| Brosley | 1 partial |

Height 2.75 inches
Diameter 5.5 inches
Base Ring Diameter 2 5/8 inches



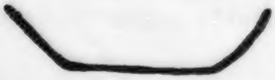
| | |
|---|---|
| B772 | 1 complete |

Height 2.75 inches
Diameter 4.75 inches
Base Ring Diameter 2.25 inches



| | |
|---|---|
| Alhambra | 1 complete |

Height 2.5 inches
Diameter 4.75 inches
Base Ring Diameter 2.25 inches



| | |
|---|---|
| B700 | 1 complete |
| B772 | 1 partial |
| Brosley | 1 partial |
| Lily | 1 partial |

Height 1.75 inches
Diameter 6.25 inches
Base Ring Diameter 3.5 inches

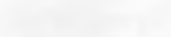


Figure 53. Vessel Shapes of Spode/Copeland Bowls.

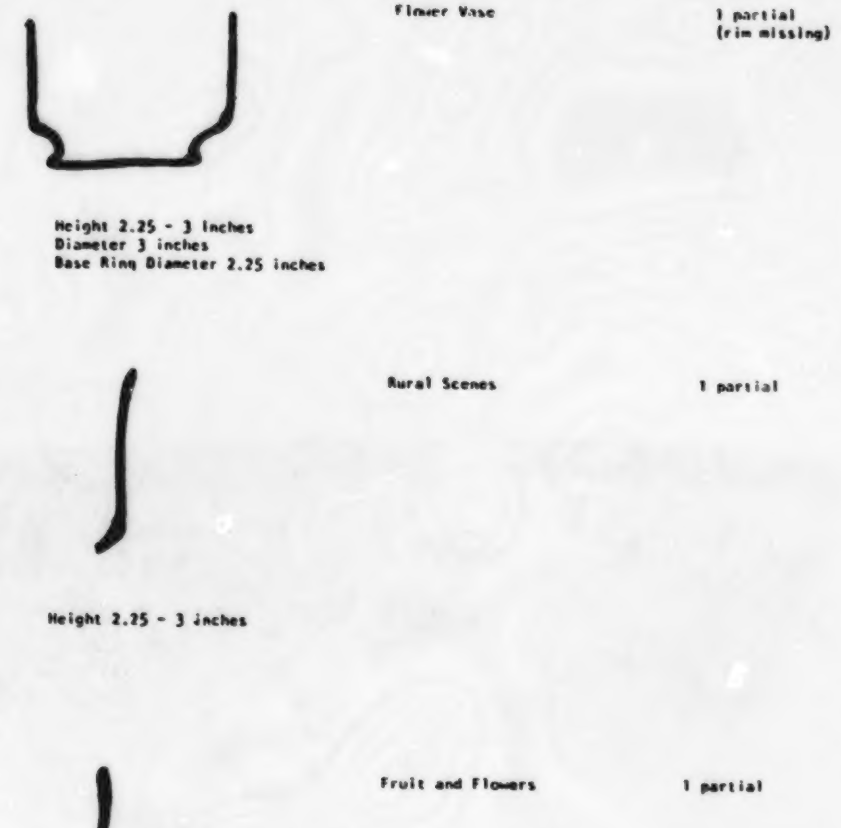

Flower Vase
1 partial
(rim missing)
Height 2.25 - 3 inches
Diameter 3 inches
Base Ring Diameter 2.25 inches
Rural Scenes
1 partial
Height 2.25 - 3 inches
Fruit and Flowers
1 partial
ridge
Height ?
B772
1 partial
Ruins
1 partial
Strawberry
1 partial
Height 2.25 - 3 inches
0
5 cm

Figure 54. Vessel Shapes of Spode/Copeland Bowls.

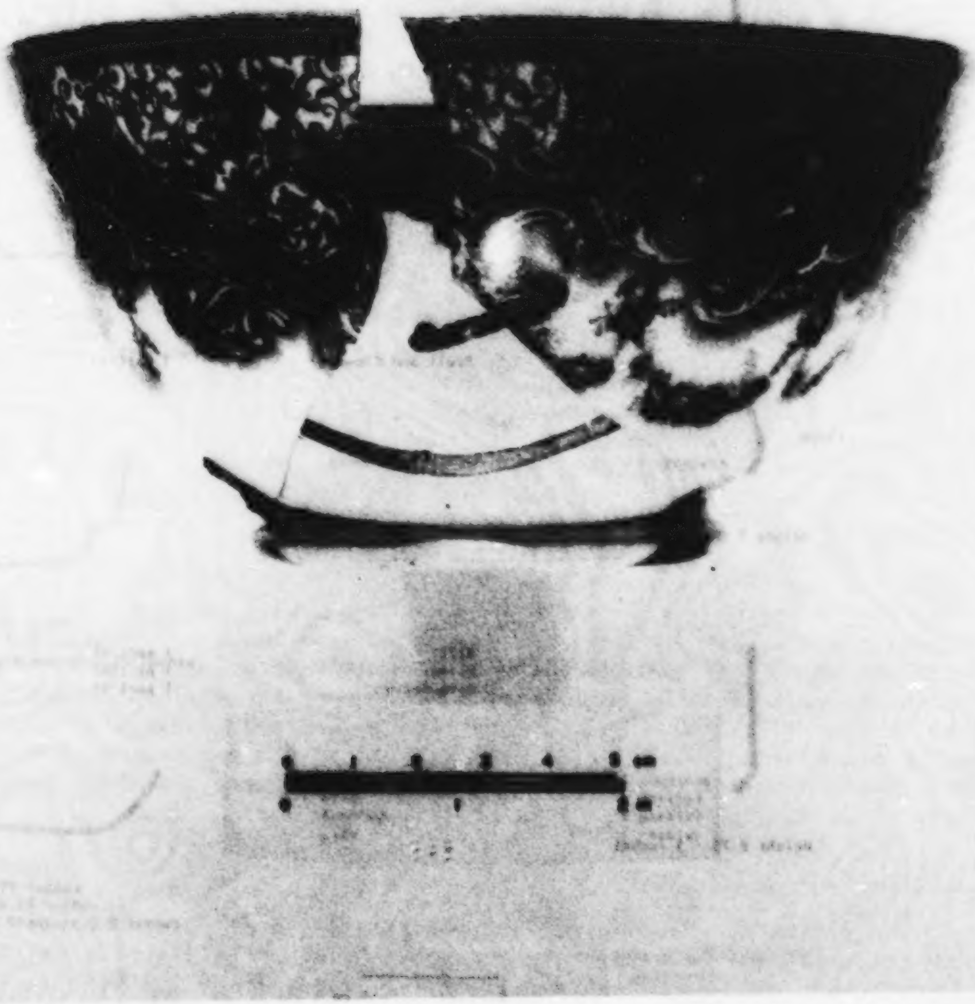

0 1 2 3 4 5 cm
0 1 2 in

Figure 55. Mended Continental Views Bowl.

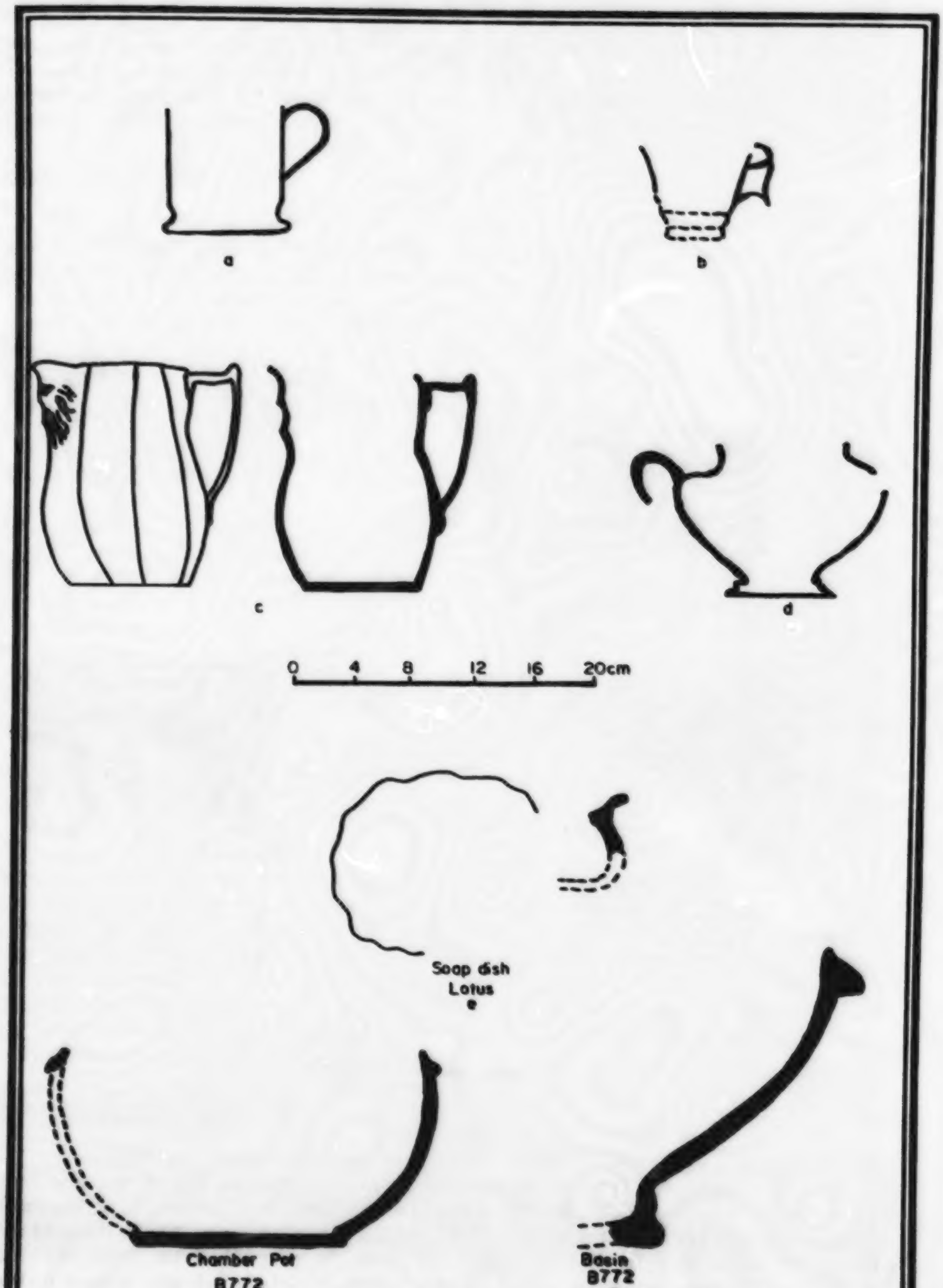

a
b
c
d
0
4
8
12
16
20cm
Soap dish
Lotus
e
Chamber Pot
B772
f
Basin
B772
g

Figure 56. Shapes and Profiles of mug, tea cup, pitcher, sauce tureen, soap dish, chamber pot and basin.

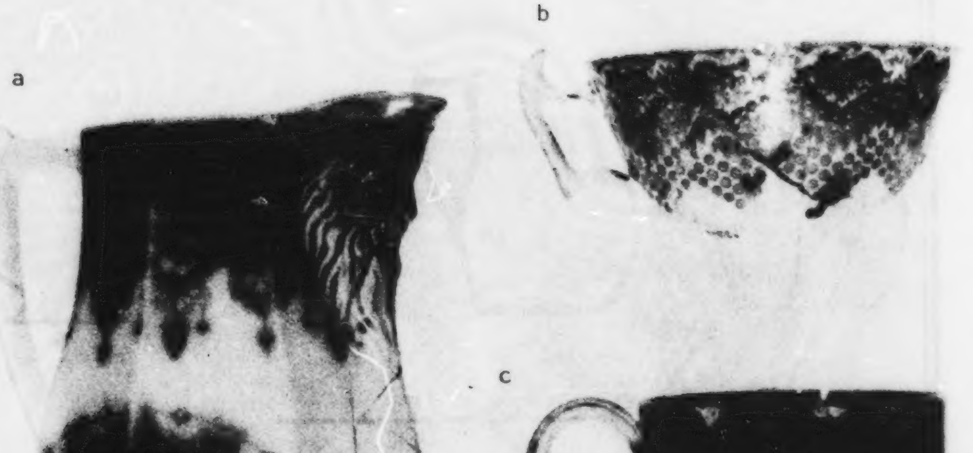


Figure 57. Alhambra pitcher, a; Lily teacup, b; Alhambra mug, c.

pitcher is decorated in the "Alhambra" pattern and measures 6 inches in height while the base has a diameter of 3 inches and bears the Copeland name mark along with the registration mark. The partially reconstructed pitcher is decorated in the "Tower" pattern.

## Decorated Vessel

This vessel is much more elaborate in shape, design and decoration and represents a sauce tureen (Fig. 56). The vessel is basically decorated in mauve underglaze transfer print in the "Lotus" pattern with the leaves and flowers of this design in relief around the handle terminal and along the base. The parts in relief have been painted by hand in mauve over the glaze (Fig. 58). The base is 3 inches in diameter with scalloped edges. Also, the inside of the base is hollow for 3/8 inches. The W.T. Copeland name mark and the registration mark are present on the basal portion of the vessel. Its total height cannot be ascertained as the rim portion of the vessel is missing, but it probably ranged in height from four to five inches.

## Toiletware

A soapdish decorated in mauve underglaze transfer print in the "Lotus" pattern (Figs. 56, 58) is partially reconstructed. It would have been approximately 6 inches long, 4 3/4 inches wide with scalloped edges and 2½ inches deep.

A partially reconstructed chamber pot with a handle decorated in underglaze blue transfer print in the pattern "B772" was also found (Fig. 56). This vessel is 5½ inches high with scalloped edges and the base has a diameter of 5½ inches with the Copeland name mark printed in green.

Most of a large basin in underglaze blue transfer print in the pattern "B772" is reconstructed (Fig. 56). It stands 4 inches high and has an opening of 14 inches and the rim is quite thick and scalloped. The base is circular with a diameter of 6.5 inches. The basin was mended in one place in the same manner, with holes and metal clasp, as the bowl and teacup. The basin probably belonged to a set which included a large pitcher. A thick rim in underglaze brown transfer print in the "Arabesque" pattern was also found, which probably belonged to a basin similar to the one above.

## Non-Copeland Earthenware

A number of pattern names and seven manufacturers of non-Copeland earthenware found at Fort Pelly 1 have been identified (Table 10). Sampson Bridgewood and Son, established around 1805, manufactured earthenware and porcelain prior to 1887 (Godden 1964:101). A green printed name mark (Fig. 59a, 60b) is found on one of the basal fragments which bears the initials "S.B&S." beneath the pattern name "THE SEASONS". Wood and Brownfield produced earthenware from about 1838-1850 (Godden

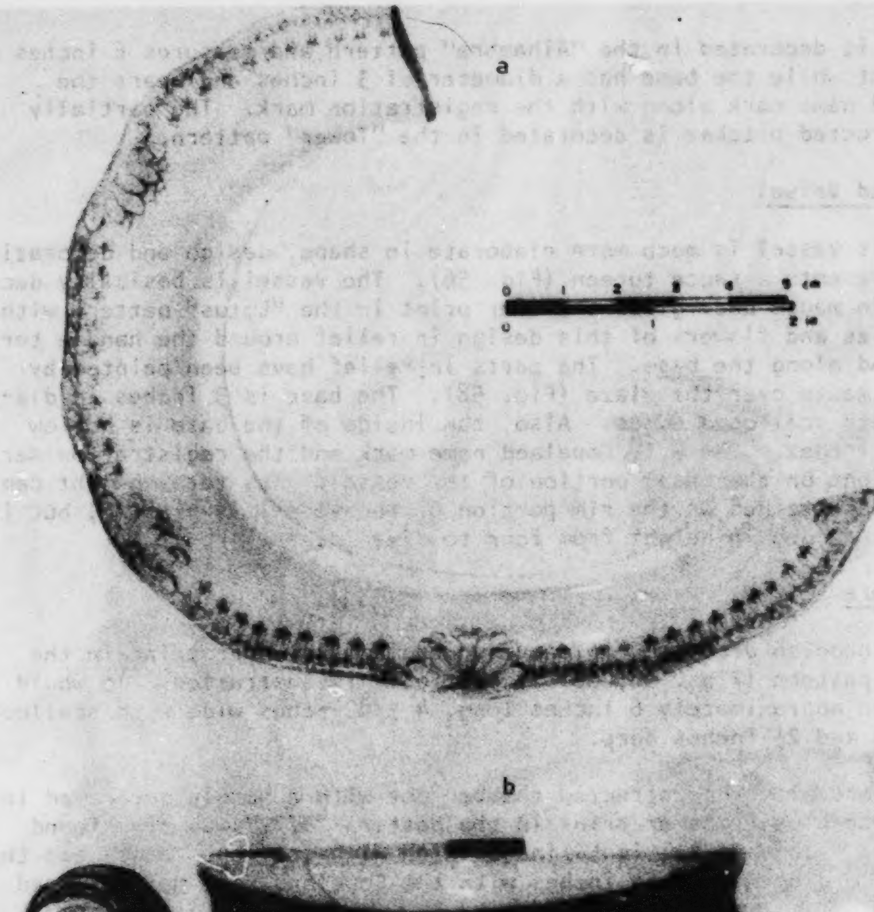

a
0 1 2 3 4 5 cm
0 1 2 in
b

Figure 58. Lotus soap dish, a; and sauce tureen, b.

## TABLE 10

### Non-Copeland Patterns and Manufacturers

| Manufacturer | Pattern Name | Decorative Technique | Colour | Number of Pieces Recovered |
|---|---|---|---|---|
| Sampson Bridgewood & Sons | Seasons (Fig. 60) | Underglaze Transfer print | Blue<br>Green | 119<br>43 |
| Wood & Brownfield | Palmyra (Fig. 60) | Underglaze Transfer print | Blue | 60 |
| Robert Cochran | Wheat | Moulded Relief | Plain | 3 |
| Ridgway | Genevese | Underglaze Transfer print | Blue | 1 |
| Charles Meigh |  |  | Plain | 1 |
| Thomas Dimmock | Mandarin (Fig. 60) | Underglaze Transfer print | Blue | 23 |
| Pinder, Bourne, & Hope | Tudor | Underglaze Transfer print | Blue | 1 |

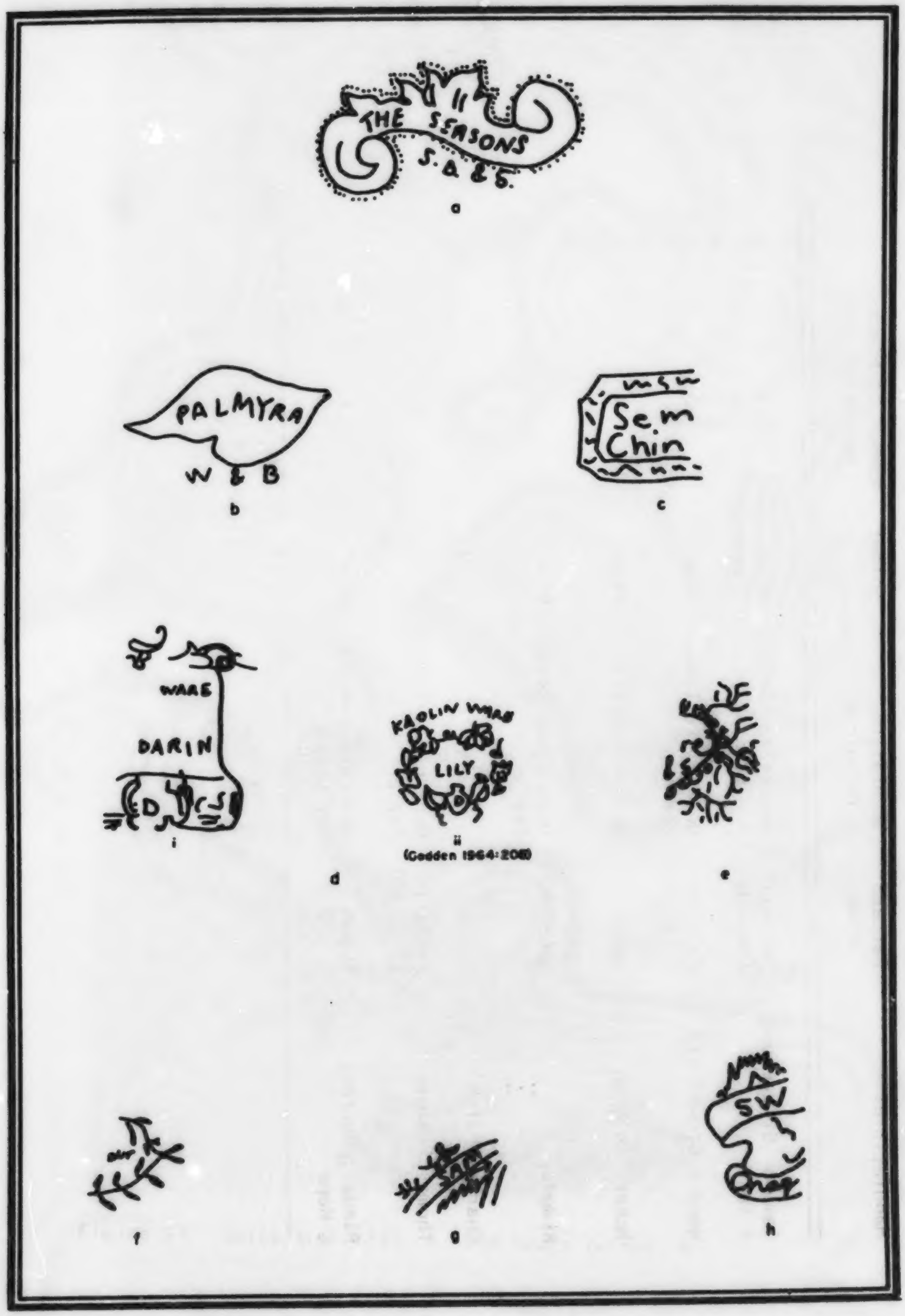

11
THE SEASONS
S.A & S.
a
PALMYRA
W & B
b
Sem
Chin
c
WARE
DARIN
D
CS
i
KAOLIN WARE
LILY
ii
(Godden 1964:208)
d
e
f
g
SW
h

Figure 59. Non-Copeland maker's marks found at Fort Pelly 1.

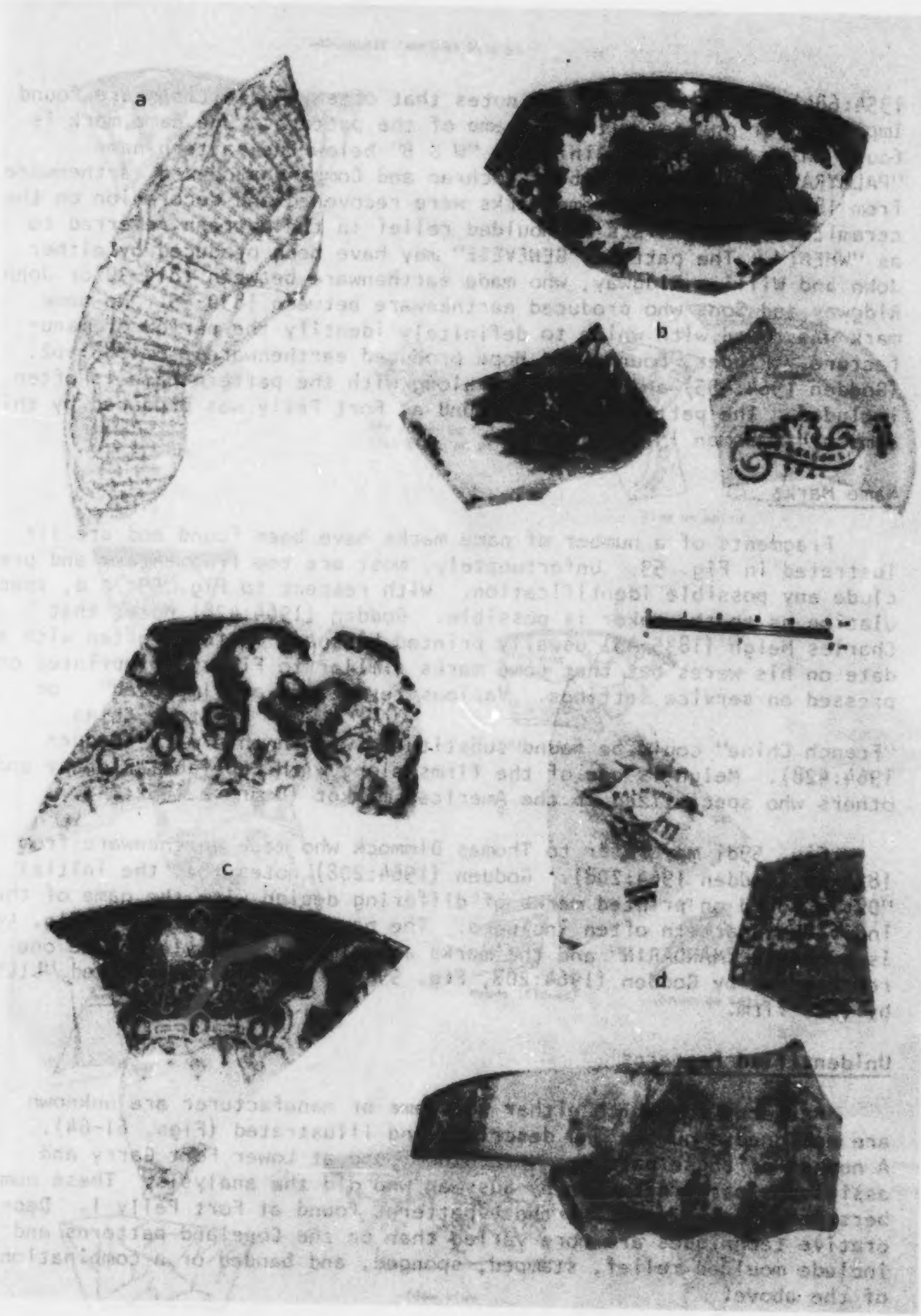


Figure 60. Non-Copeland patterns: "Chequered Border", a; Seasons, b; Mandarin, c; Palmyra, d.

1954:684). Godden (1964:684) notes that often the initials are found impressed or printed with the name of the pattern. One name mark is found which bears their initials "W & B" below the pattern name "PALMYRA" (Fig. 59b). Robert Cochran and Company produced earthenware from 1846 to 1918. No name marks were recovered and decoration on the ceramics found consists of moulded relief in the pattern referred to as "WHEAT". The pattern "GENEVESE" may have been produced by either John and William Ridgway, who made earthenware between 1814-30 or John Ridgway and Sons who produced earthenware between 1830-55. No name mark was found with which to definitely identify the period of manufacture. Pinder, Bourne and Hope produced earthenware from 1851-62, (Godden 1964:495) and their name along with the pattern name is often included. The pattern "TUDOR" found at Fort Pelly was produced by this company (Sussman 1979:101).

## Name Marks

Fragments of a number of name marks have been found and are illustrated in Fig. 59. Unfortunately, most are too fragmentary and preclude any possible identification. With respect to Fig. 59c & d, speculation as to the maker is possible. Godden (1964:428) notes that Charles Meigh (1835-49) usually printed his name in full, often with a date on his wares but that some marks similar to Fig. 59c imprinted or pressed on service settings. Various terms such as "Improved" or
Stone China
"French China" could be found substituted within this mark (Godden 1964:428). Meigh is one of the firms along with Copeland, Ridgway and others who specialized in the American market (Bemrose 1952:24).

Fig. 59di may refer to Thomas Dimmock who made earthenware from 1828-58 (Godden 1964:208). Godden (1964:208) notes that the initial "D" is found on printed marks of differing design with the name of the individual pattern often included. The name of the pattern in Fig. 59di is probably "MANDARIN" and the marks are similar in style to the one represented by Godden (1964:208, Fig. 59dii) for a pattern named "LILY" by this firm.

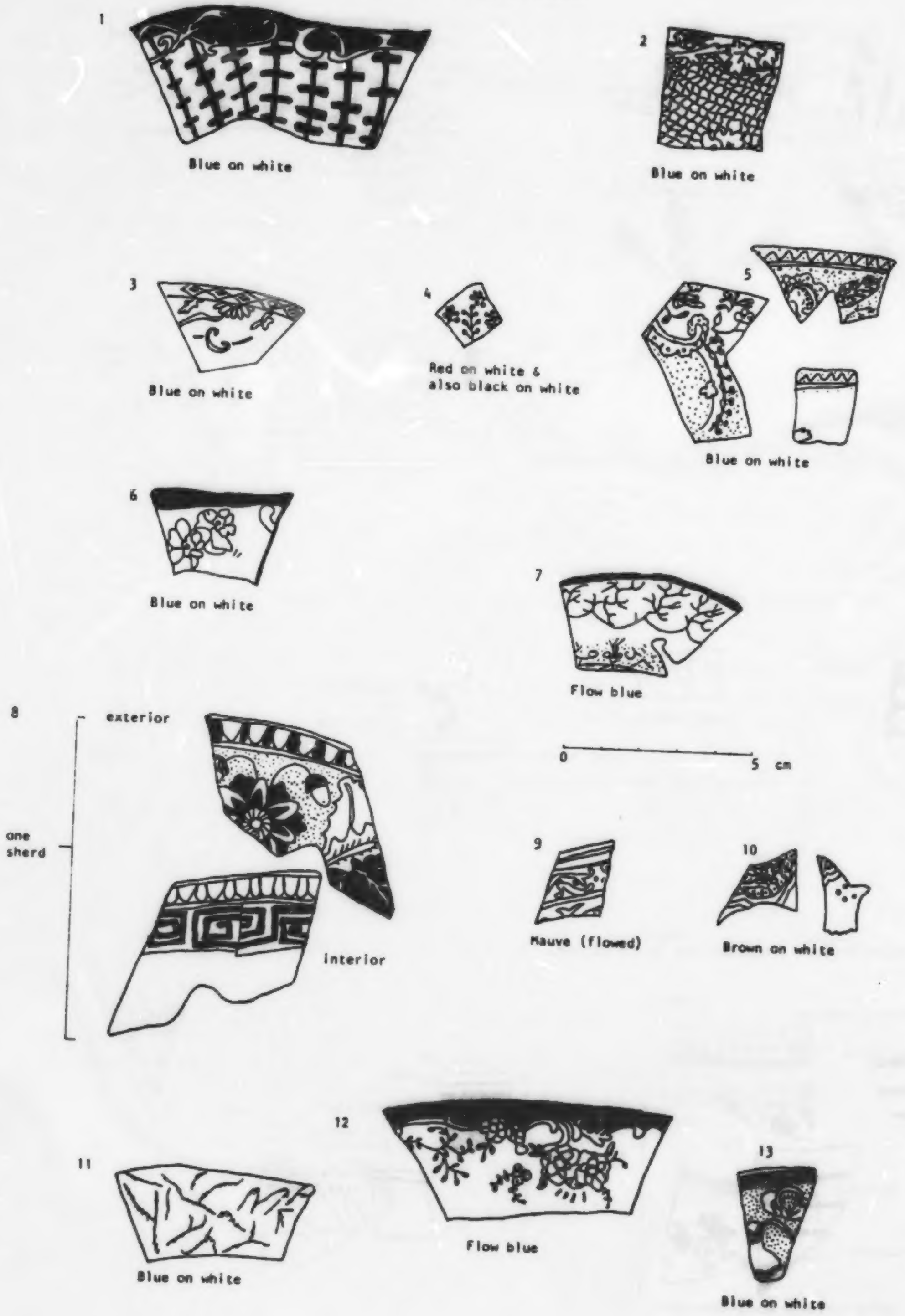
## Unidentified Patterns

Patterns for which either the name or manufacturer are unknown are assigned a number and described and illustrated (Figs. 61-64). A number of these patterns have been found at Lower Fort Garry and assigned a pattern number by Sussman who did the analysis. These numbers have been listed for those patterns found at Fort Pelly I. Decorative techniques are more varied than on the Copeland patterns and include moulded relief, stamped, sponged, and banded or a combination of the above.

Stamping refers to a decorative technique in which the root of the sponge (which is more firm and closer textured than the top) is cut in the pattern desired, then dipped in colour and applied to the

UNIDENTIFIED EARTHENWARE PATTERNS

UNDERGLAZE TRANSFER PRINTED


1
2
3
4
5
6
7
8
exterior
one sherd
interior
0
5 cm
9
10
11
12
13

1 Blue on white

2 Blue on white

3 Blue on white

4 Red on white & also black on white

5 Blue on white

6 Blue on white

7 Flow blue

8 exterior, interior (one sherd)

9 Mauve (flowed)

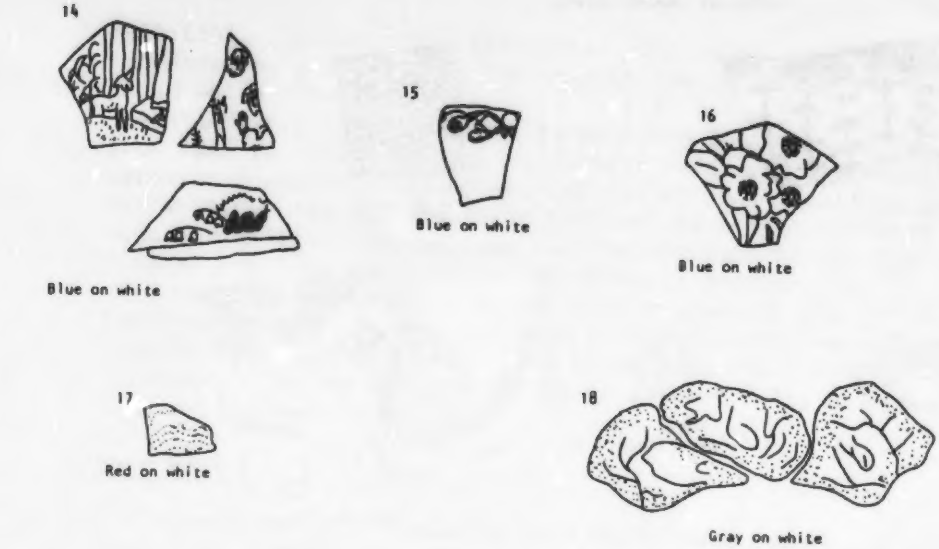
10 Brown on white

11 Blue on white

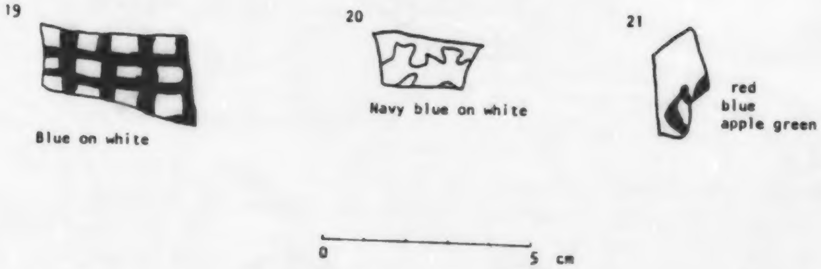
12 Flow blue

13 Blue on white

Figure 61. Unidentified Earthenware patterns.


14
Blue on white
15
Blue on white
16
Blue on white
17
Red on white
18
Gray on white

STAMPED


19
Blue on white
20
Navy blue on white
21
red
blue
apple green
0
5 cm

BANDED

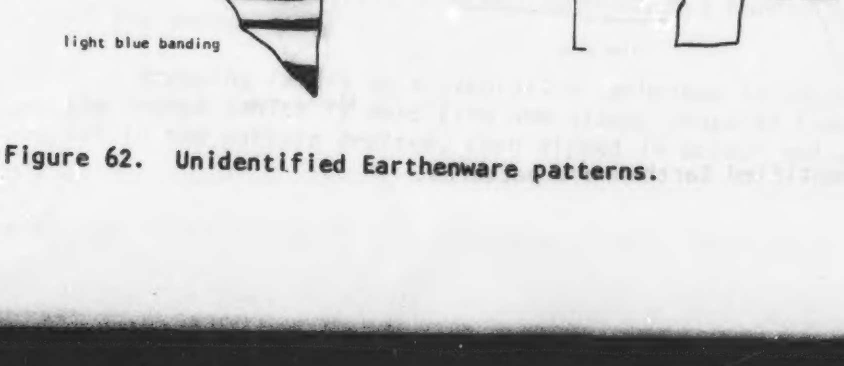
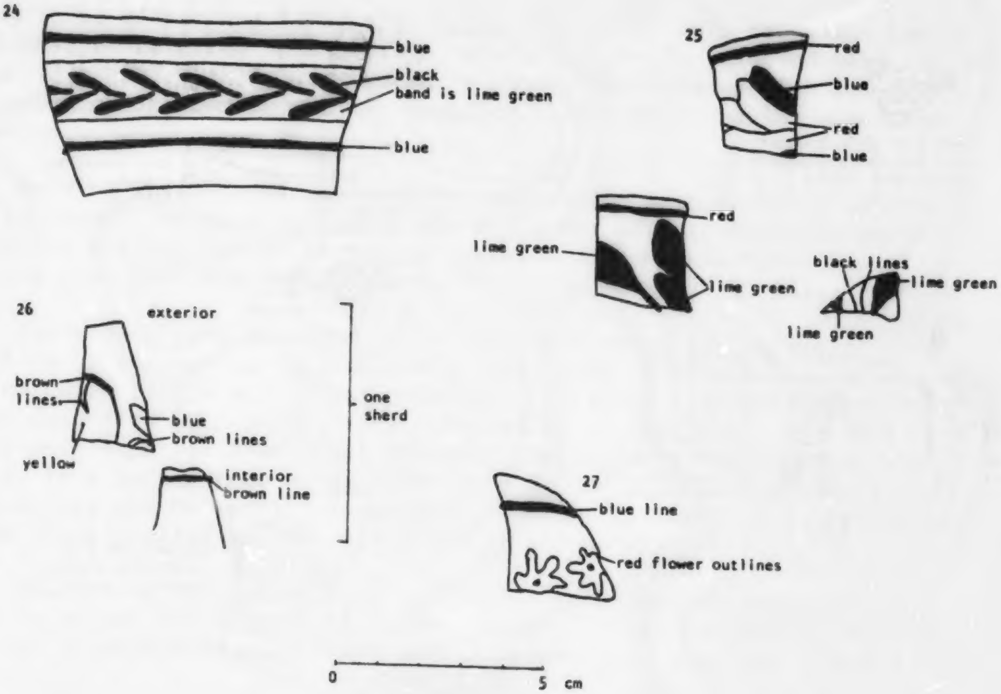
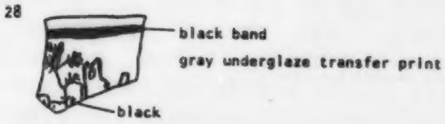

22
light blue banding
rim
light blue banding
23
exterior
red
shadow blue
one
sherd
interior
red band

Figure 62. Unidentified Earthenware patterns.

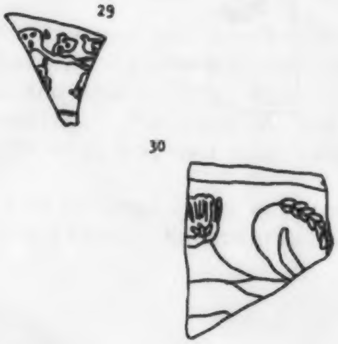
BANDED AND STAMPED


24
blue
black
band is lime green
blue
25
red
blue
red
blue
red
lime green
lime green
black lines
lime green
lime green
26
exterior
brown lines
blue
brown lines
yellow
interior
brown line
one sherd
27
blue line
red flower outlines
0
5 cm

UNDERGLAZE TRANSFER PRINT AND BANDED


28
black band
gray underglaze transfer print
black

MOULDED RELIEF



MOULDED RELIEF AND UNDERGLAZE TRANSFER PRINT

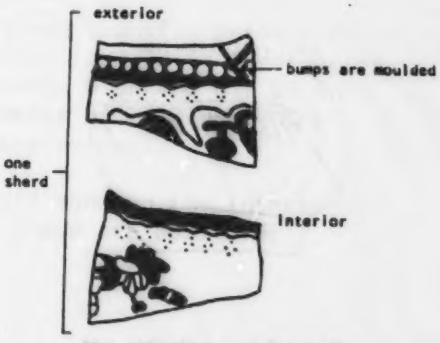

exterior
bumps are moulded
one sherd
interior
Blue underglaze transfer print

Figure 63. Unidentified Earthenware patterns.

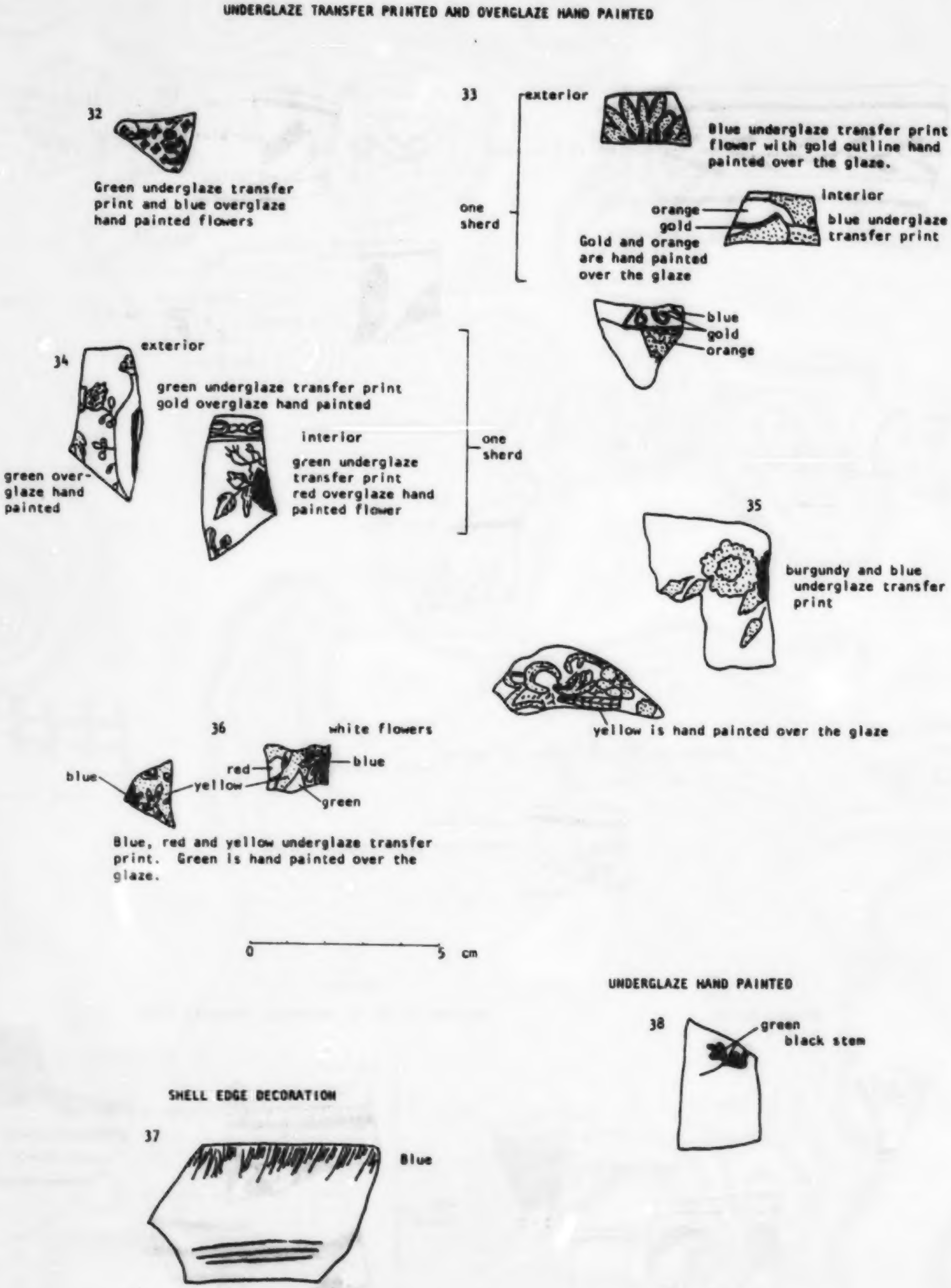

UNDERGLAZE TRANSFER PRINTED AND OVERGLAZE HAND PAINTED
32
Green underglaze transfer print and blue overglaze hand painted flowers
33
exterior
Blue underglaze transfer print flower with gold outline hand painted over the glaze.
one sherd
interior
orange
gold
blue underglaze transfer print
Gold and orange are hand painted over the glaze
blue
gold
orange
34
exterior
green underglaze transfer print gold overglaze hand painted
green overglaze hand painted
interior
green underglaze transfer print red overglaze hand painted flower
one sherd
35
burgundy and blue underglaze transfer print
yellow is hand painted over the glaze
36
white flowers
blue
red
yellow
blue
green
Blue, red and yellow underglaze transfer print. Green is hand painted over the glaze.
0
5 cm
UNDERGLAZE HAND PAINTED
38
green
black stem
SHELL EDGE DECORATION
37
Blue

Figure 64. Unidentified Earthenware patterns.

items to be glazed and fired (Finlayson 1972:54). This technique may, at times, be referred to as sponge, but this term is reserved here to describe a cruder technique whereby a sponge impregnated with colour is daubed on the unfired object (Sussman 1979a:233), leaving a mottled appearance.

Banding which is often found in combination with stamping refers to the "bands" or hand painted lines which are used to decorate wares -- mainly the top border of bowls, plates and other utensils, but often the main body and interior as well (Finlayson 1972:54-55).

Items decorated by stamping or banding display gay, vivid colours which range through various shades of red, pink, green, brown, blue and yellow, with little attempt at shading. Finlayson (1972:52) notes that wares decorated by stamping were referred to as "Portneuf" and that these were exported from Great Britain, particularly from Scotland to Canada in a period from about 1840 to 1920, and distributed mainly from Quebec City and Montreal. In general, no maker's marks were applied to these items precluding identification of the manufacturer.

Moulded relief refers to a decorative technique in which the pattern is raised (or in relief) on the vessel. Three patterns, "Wheat" and two unidentified ones display this decorative technique around the rim.

### Vessel Shapes (Non-Copeland)

Vessel shapes, sizes and profiles could not be determined for the majority of the non-Copeland ceramics. However, the individual vessel portions and quantity of the various patterns are presented in Table 11. In a number of cases, the primary function of the vessel can be attempted, and these are listed in Table 12, along with pattern name and the manufacturer (where possible).

The jar is only partially reconstructed and appears to be panelled and may have been octagonal in shape (Fig. 65b). No other observations, such as size are possible.

The chamber pot decorated in gray underglaze transfer print with black outline is almost completely reconstructed, providing information on size and shape (Fig. 65a). It stands 6 inches high and has an 8 inch opening. The base of the pot has a diameter of 6 inches. The handle is missing, but the handle terminals are evident.

A rim belonging to a large bowl has a gold band on the interior under the glaze. No observations of size or shape are possible.

TABLE 11

Non-Copeland Patterns by Identifiable Portions

| Non-Copeland Patterns | Rim | Spout | Pouring Lip | Neck/Shoulder/ Body | Footring | Handle | Base | Base/Footring | Body | Rim/Body/Base | Rim/Shoulder | Body/Base | Footring/Body | Handle Terminal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Seasons | 36 | | | 10 | | | 9 | 5 | 98 | 6 | | 1 | 1 | |
| Palmyra | 22 | | | 5 | | | 2 | 1 | 20 | | 1 | 1 | | |
| Pale Foliage | 1 | | | | | | | | 5 | | | | | |
| Fibre | 26 | | | 4 | 1 | 1 | 4 | 5 | 36 | 2 | | 1 | | 1 |
| "Chequered Border" Pattern 63 (Sussman 1979) | | | | | | | | | 1 | | | | | |
| TTTT Border | 11 | | | | | | | | 9 | 4 | | 1 | | |
| Tudor | | | | | | | | | 1 | | | | | |
| Willow | 34 | | | 8 | | | 4 | 5 | 27 | 4 | 4 | | 1 | |
| Mandarin | 4 | | | 4 | | | 1 | 2 | 8 | 2 | 2 | | | |
| Genevese | 1 | | | | | | | | | | | | | |
| Sponged | 20 | | | | | | | | 34 | | | 3 | | |
| Pattern #1 | | | | | | | | | 1 | 1 | | | | |
| Pattern #2 | 2 | | | | | | | | 2 | | | | | |
| Pattern #3 | 39 | | | 4 | | | 9 | 3 | 88 | | 1 | | 2 | 1 |
| Pattern #4 | | | | | 1 | | | | 4 | | | | | |
| Pattern #5 | 10 | | | | | | | | 7 | | | | | |
| Pattern #6 | 2 | | | | | | | | | | | | | |
| Pattern #7 | 1 | | | | | | 1 | | 4 | | | | | |
| Pattern #8 | 3 | | | | | | | 2 | 3 | | | | | |
| Pattern #9 | 1 | | | | | | | | 1 | | | | | |
| Pattern #10 | | | | | | | | | 3 | | | | | |
| Pattern #11 | 2 | | | | | | | | 5 | 1 | | | | |
| Pattern #12 | 3 | | | 2 | | | | | | 1 | | | 1 | |
| Pattern #13 | 3 | | | | | | | | 10 | | | | | |
| Pattern #14 | | | | | | | | | 1 | | | | | |
| Pattern #15 | 2 | | | | | | | | | | | | | |
| Pattern #16 | | | | | | | | | 1 | | | | | |
| Pattern #17 | | | | | | | | | 1 | | | | | |
| Pattern #18 | 2 | | | | | | 6 | | 9 | | | | | |
| Pattern #19 | 4 | | | | | | | | 2 | | | | | |
| Pattern #20 | | | | 1 | | | | | | | | | | |
| Pattern #21 | 1 | | | | | | | | | | | | | |
| Pattern #22 | 2 | 1 | | | | | | | 15 | | | | | |
| Pattern #23 | 4 | | | | | | | | 11 | | | | | |
| Pattern #24 | 8 | | | 1 | | | | | | | | | | |
| Pattern #25 | 15 | | | | | | | | 6 | | | | | |
| Pattern #26 | 6 | | | | | | | | 6 | | | | | |
| Pattern #27 | 11 | | | | | | | 1 | 15 | | | | | |
| Pattern #28 | 3 | | | | | | | | | | | | | |
| Pattern #29 | 1 | | | | | | | | | | | | | |
| Pattern #30 | 2 | | | | | | | 1 | 3 | 1 | | | | |
| Pattern #31 | | | 1 | | | | | | 1 | | | | | |
| Pattern #32 | 4 | | | | | | | 1 | 7 | | | | | |
| Pattern #33 | 1 | | | | | | | | 1 | | | | | |
| Pattern #34 | 1 | | | | | | | | | | | | | |
| Pattern #35 | 1 | | | | | | | | 3 | | | | | |
| Pattern #36 | 1 | | | | | | | | 5 | | | | | |
| Pattern #37 | 5 | | | 1 | | | | | 1 | | 3 | | | |
| Pattern #38 | | | | | | | | | 1 | | | | | |
| Unidentified | 19 | | | | 2 | | | | 15 | | | | | |

TABLE 12

Non-Copeland Ceramic Vessels

| Pattern Name | Manufacturer | Primary Function |
|---|---|---|
| Palmyra | Wood & Brownfield | plate (1)*<br>bowl (1) |
| Seasons | Samson & Bridgwood | saucer (2)<br>plate (1)<br>bowl (1)<br>shallow bowl(2) |
| | ------------ | shallow bowl(3) |
| Genevese | Ridgway | plate (scalloped edge) |
| Fibre | ------------ | bowl (1) (green)<br>saucer(1) (green)<br>teacup(2) (1 blue and 1 green) |
| Stamped (red with blue banding | ------------ | saucer (1) |
| Sponge | ------------ | saucer (1)<br>bowl (1) |
| Plain | ------------ | cup (1)<br>jar (1) |
| Mandarin | Dimmock ? | plate |
| Banded | | bowl (1) |

* number in brackets represents quantity

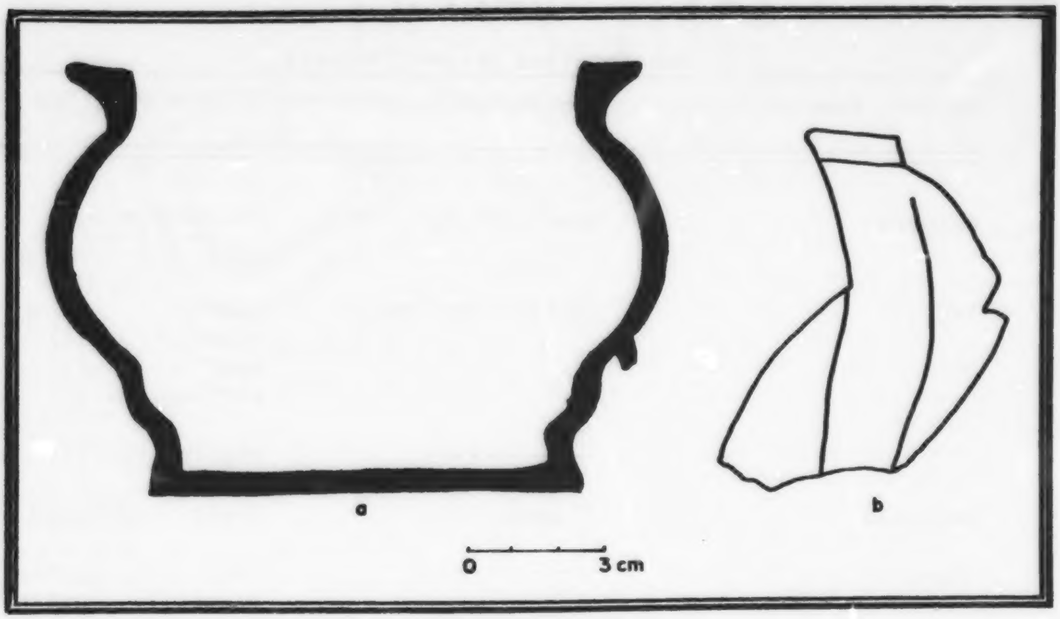


Figure 65. Shapes and profile of Non-Copeland jar and chamber pot.

### 1.1.5 Continental Porcelain

Continental or European porcelain manufactured in France and Germany became popular in North America during the latter half of the 19th century (Collard 1967:189). French porcelain had been brought to Canada in the early 1800s, but it was not until 1850 that large quantities were being imported (Collard 1967:189). German porcelain became popular towards the end of the century and more so after 1900. Decorative techniques associated with this ware included transfer print underglaze and overglaze with painted accents, overglaze painting, gilding or serigraphing with other decoration.

Porcelain was used mainly in teaware and gift items such as figurines, and for dolls and toy dishes. Nineteen pieces (4 rim fragments, 11 body fragments, 1 handle fragment and 3 figurine fragments) were found at Fort Pelly 1. Decorative techniques include: (1) metallic red banding under the glaze on one rim fragment; (2) metallic gold SSS border over the glaze on the interior and exterior of two rim sherds from the same bowl; (3) brown underglaze transfer print with gold overglaze hand painting on a rim sherd; (4) overglaze hand painting in colours of green, brown, red, gold and pink on pieces belonging to a figurine; (5) blue underglaze transfer print on two body sherds; (6) overglaze hand painting on two body sherds. The remaining seven body sherds and handle fragments are plain.

### 1.1.6 Ironstone

Ironstone was developed in the early 19th century in England. Improvements in the manufacture of ironstone were continually being made in the first half of the 19th century and began gaining in popularity towards the mid-1800s because of its durability. Not until after 1850 was the ware made in any great quantity. Decorative techniques included moulded relief and transfer print (Fisher 1978:264-65). It was essentially a utility ware whose functions included dinnerware, teaware and toiletware (Bemrose 1952:16).

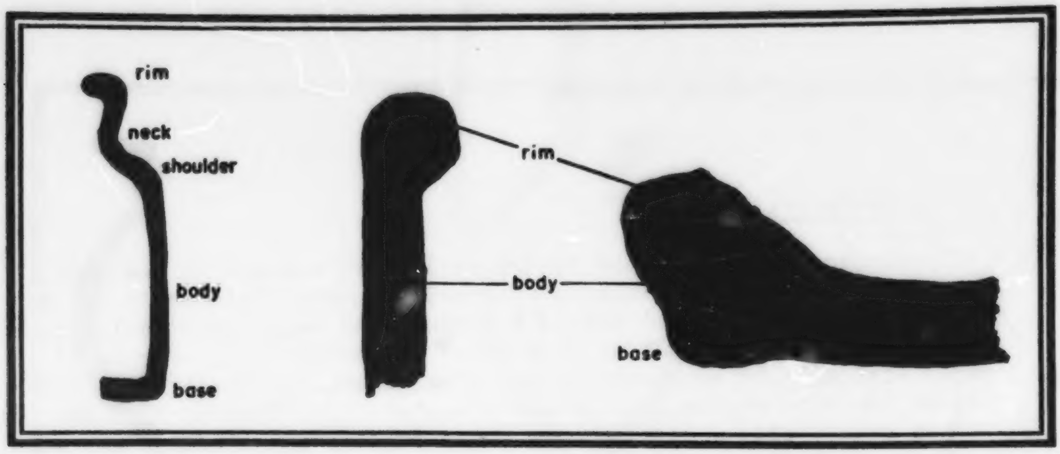
Twenty-four pieces of ironstone were found at Fort Pelly 1, representing the following vessel portions: 8 rim fragments; 1 basal fragment; 4 base/footring fragments; 9 body sherds; 1 footring/body fragment; 1 rim/body/base fragment. Of these, five pieces are plain, while the others have moulded relief designs depicting grain or wheat. On the base is a black painted maker's mark with "IRONSTONE
H & G Late Harvey "
printed under a royal coat of arms. The "H & G" stands for Holland and Green, Staffordshire Potters in London, who succeeded C & W.K. Harvey in 1853 and continued making earthenware and ironstone until 1882 at which time they were succeeded by Green Clark and Clay (Godden 1964:331; Little 1969:70). Godden (1964:331) notes that the Royal Arms occur in several marks.

### 1.1.7 Coarse Stoneware (Storage Ware)

A total of 115 coarse stoneware fragments along with six complete and three partially complete vessels was recovered at Fort Pelly 1. Two main types, the Derbyshire-style brown and Bristol-style brown, are represented along with a number of unidentified types. Shapes for profiles that could be discerned from various fragments and the terms used for identifiable portions are illustrated in Fig. 66.

Derbyshire-style brown stoneware is light to dark gray and/or buff to beige in colour, with a very thin brown salt glaze on the exterior, in a variety of shades. If the vessel was designed for non-food substances the insides would be left unglazed. Their functions included bottles, jugs, jars for food and non-food products (mainly ink, blacking, beer, etc.). Derbyshire-style brown earthenware was popular in the first three quarters of the 19th century (Sussman n.d.).

Derbyshire-style brown comprises 17.4% of the coarse stoneware fragments found. The coarse stoneware fragments are either a buff colour or medium-gray colour and all have a thin salt glaze on the


rim
neck
shoulder
body
base
rim
body
base

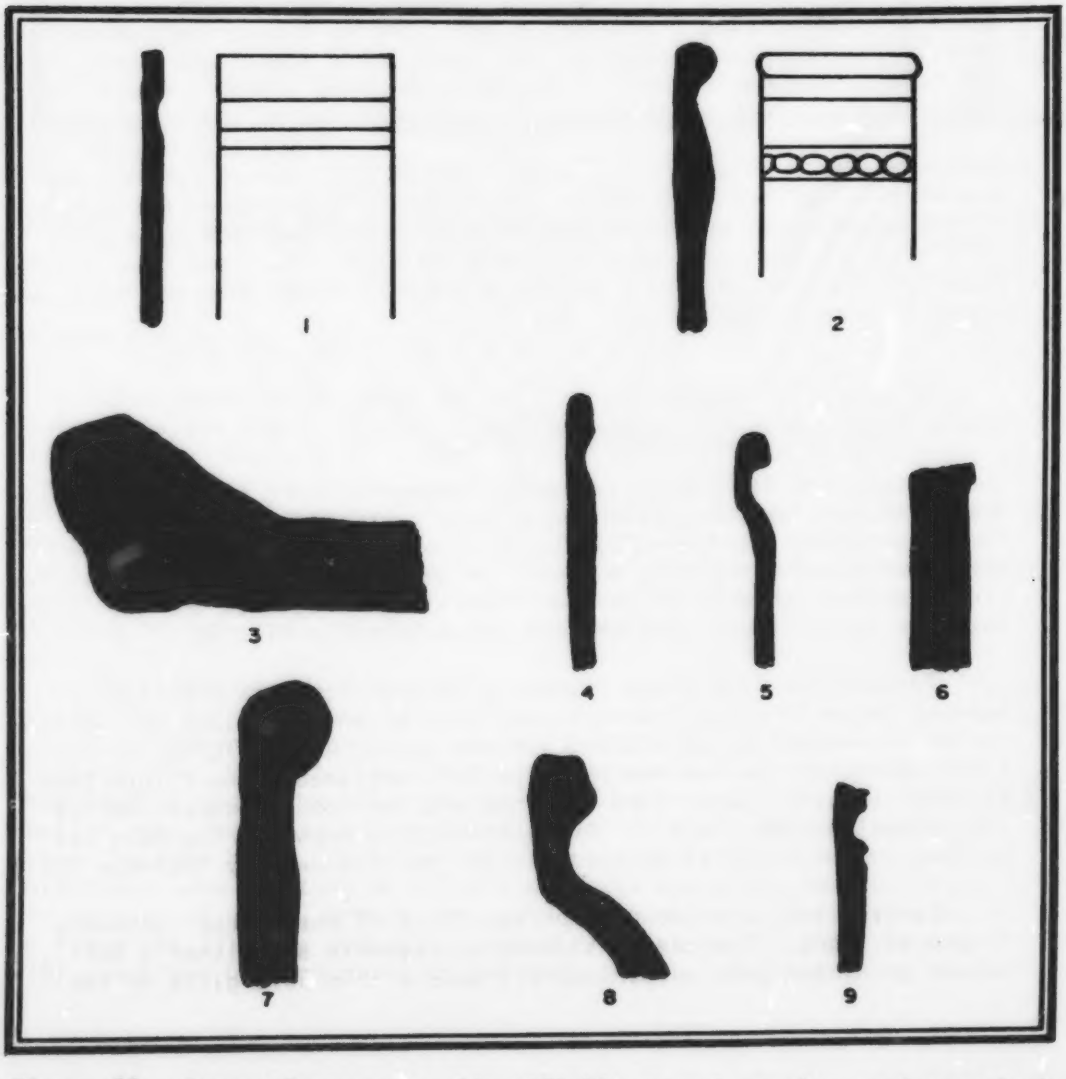


Figure 66. Coarse Stoneware: Identifiable vessel portions and vessel shapes.

exterior only, ranging in colour from light brown to dark brown (Table 13). Most of the fragments recovered consist of body sherds. Three complete vessels, two reconstructed vessels, and one partially complete vessel of Derbyshire-style brown stoneware were included. These are illustrated and described in Fig. 67. Green, red, and black paint is present in three of the jugs and a piece of metal is inside the container with the black paint.

Bristol-style or Bristol-glaze brown stoneware, is a homogenous buff fabric of a moderately coarse texture and highly vitrified. A glossy feldspathic clear and colourless glaze is found on both the exterior and interior surfaces and the upper portion of the glaze (Sussman n.d.). These wares were used for beer bottles, ginger beer bottles, "mustard" jars and other wide-necked jars for food preservation (Sussman n.d.). The invention of the glaze used on these wares is attributed to William Powell of Bristol (1835). The mark "POWELL BRISTOL" is found impressed on the exterior of two body fragments. The number "4" is found impressed beside one of the marks. This probably is from a 4 oz food storage jar (Sussman 1979:160, 317).

No complete jars or bottles were reconstructed, but Bristol-style stoneware fragments comprise 36.52% of the coarse stoneware found. Most of the fragments found consist of plain sherds from various portions of the vessel (Table 14). A number of fragments have moulded relief designs and are from vessels shaped in styles 2 and 3 (Fig. 66). A number of other sherds were from vessels shaped in style 1 (Fig. 66).

One small completely reconstructed vessel and two partially reconstructed ones are described and illustrated in Fig. 67. The larger vessel bears the mark "GLAS UE LAMBETH". These are from England, generally the London area (Lambeth) and are common from 1800-1900 (Sussman n.d.). The remaining 56.08% of the coarse stoneware fragments from Fort Pelly 1 could not be classified by type or common name. Table 15 presents a breakdown of these fragments by identifiable portion, with reference to glaze, extent of glaze, type of glaze, colour, and where possible, the vessel shape and/or primary or secondary function.

## 1.2 Distribution of Ceramics by Feature

### 1.2.1 Early Palisade

Ceramics found in the early palisade are few but varied. Twelve Copeland patterns were identified and most post-date the construction of the palisade. Other manufacturers represented included Sampson and Bridgwood and six unknown. The patterns of the unknown manufacturers included banded and moulded relef designs as well as underglaze transfer printed. Most of the pieces found consisted of rim, body or base

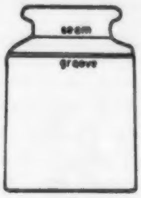
TABLE 13

Derbyshire-style Brown Stoneware

| Material | Identifiable Portion | Glaze | Extent | Colour | Number of Pieces | Style/ Shape | Other |
|---|---|---|---|---|---|---|---|
| Buff-coloured stoneware | shoulder/body | salt | exterior | med.-brown | 1 |  | parallel incised lines 2 around shoulder |
|  | body | salt | exterior | med.-brown | 3 |  |  |
|  | body | salt | exterior | rust | 1 |  |  |
|  | body | salt | exterior | lt.-brown | 1 |  |  |
|  | body | salt | exterior | golden brown | 1 |  |  |
|  | body | salt | exterior | rust/brown | 1 |  |  |
|  | rim/neck/shoulder | salt | exterior | dark brown |  | 9 |  |
|  | neck/shoulder | salt | exterior | dark brown | 1 |  |  |
| Med.-gray coloured stoneware | body/base | salt | exterior | rust/brown | 1 |  |  |
|  | body | salt | exterior | dark brown | 3 |  |  |
|  | body | salt | exterior | lt.-brown | 2 |  |  |
|  | body | salt | exterior | golden brown | 1 |  |  |
|  | body | salt | exterior | rust/brown | 3 |  |  |

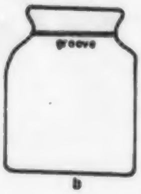
* lt. = light
med. = medium
reconstructed vessels not included

Derbyshire-Style Coarse Stoneware



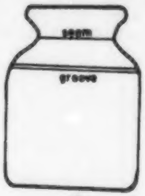
a

Stoneware - Gray
Glaze - Exterior
Colour - Rust/Brown
Glaze - Salt
No Design
No Maker's Mark
Small Jar
Black Paint and piece of
metal inside



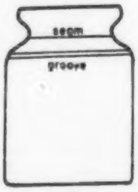
b

Stoneware - Buff
Glaze - Exterior
Colour - Golden Brown
Glaze - Salt
No Design
No Maker's Mark
Small Jar
Green Paint inside



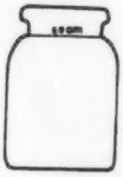
c

Stoneware - Buff
Glaze - Exterior
Colour - Dark Brown
Glaze - Salt
No Design
No Maker's Mark
Small Jar
Reconstructed - No.
of pieces - 10



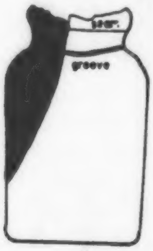
d

Stoneware - Buff
Glaze - Exterior
Colour - Rust/Brown
Glaze - Salt
No Design
No Maker's Mark
Small Jar
Vermillion inside
Bottom burnt



e

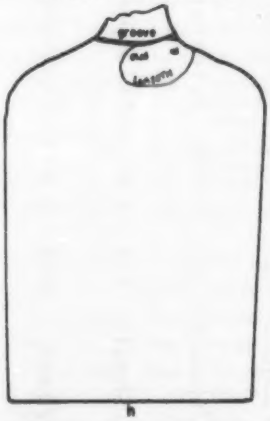
Stoneware - Buff
Glaze - Exterior
Colour - Golden Brown
Glaze - Salt
Small Jar
Reconstructed - No. of
pieces - 6

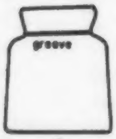


f

Stoneware - Buff
Glaze - Exterior
Colour - Golden Brown
with dark Brown top.
Glaze - Salt
No Design
No Maker's Mark
Medium Jar

Miscellaneous Stoneware



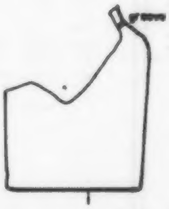


g

Stoneware - Buff
Glaze - Exterior
Colour - Buff
Glaze - Feldspar
No Design
No Maker's Mark
Small Jar
White Paint inside

h

Stoneware - Gray
Glaze - Exterior
Colour - Top exterior portion dipped in Brown Ferruginous slip. Rest of exterior is golden brown. The interior is a yellow/buff colour.
Jug
Lambeth Ware



i

Stoneware - Buff
Glaze - Exterior
Colour - Golden Brown
with Brown top
Glaze - Salt
No Design
No Maker's Mark
Medium Jar

Figure 67. Coarse Stoneware.

## TABLE 14

### Bristol-Style Brown Stoneware

| Identifiable Portion | Glaze (Extent) | Type | Colour | Decoration | Number | Shape/ Profile | Marks |
|---|---|---|---|---|---|---|---|
| Rim | int. & ext. | Feldspar | Buff | Plain | 2 | | |
| Rim/Neck | int. & ext. | Feldspar | Buff | Plain | 2 | | |
| Rim/Neck | int. & ext. | Feldspar | Buff | Plain | 1 | 1 | |
| Rim/Neck/Shoulder | int. & ext. | Feldspar | Buff | Moulded Relief | 2 | 2 | |
| Rim/Neck/Shoulder | int. & ext. | Feldspar | Buff & Rust | Plain | 1 | 3 | |
| Rim/Neck/Shoulder | int. & ext. | Feldspar | Buff | Plain | 2 | 1 | |
| ·Rim/Neck/Shoulder | int. & ext. | Feldspar | Buff | Plain | 1 | | |
| Rim/Body/Base | int. & ext. | Feldspar | Buff | Plain | 1 | 1 | POWELL BRISTOL |
| Rim/Body/Base | int. & ext. | Feldspar | Buff | Plain | 1 | 1 | |
| Body | int. & ext. | Feldspar | Buff | Moulded Relief | 1 | 2 | |
| Body | int. & ext. | Feldspar | Buff | Plain | 16 | | |
| Body/Base | int. & ext. | Feldspar | Buff | Plain | 1 | 1 | POWELL BRISTOL |
| Body/Base | int. & ext. | Feldspar | Buff | Plain | 9 | | |
| Unidentified | (extremely burnt) | | | | | | |

* int. = interior
ext. = exterior

TABLE 15

Coarse Stoneware

| Identifiable Portion | Stoneware Colour | Glaze or Slip | Extent of Glaze | Type | Colour | Number | Shape/ Style | Primary Function | Secondary Function |
|---|---|---|---|---|---|---|---|---|---|
| Rim | Buff | Glaze | int. & ext. | Lead | Dk. Gray | 1 | | | |
| Rim/Neck/Shoulder | White | Glaze | int. & ext. | Lead | White | 3 | 5 | small jar | |
| Rim/Neck/Shoulder | Buff | Glaze | int. & ext. | Lead | Brown | 1 | | jar | preserves |
| Rim/Neck/Shoulder | Med.-Gray | Glaze | int. & ext. | Lead | Dk. Brown | 2 | 8 | | |
| Rim/Neck/Shoulder | Buff | Glaze | ext. | Lead | Buff | 1 | 10 | | |
| Rim/Body | Med.-Gray | Glaze | int. & ext. | Lead | Lt. Brown | 2 | 7 | bottle | |
| Rim/Body | Med.-Gray | Glaze | ext. | Lead | Rust | 1 | 3 | saucer | flower pot |
| Rim/Body/Base | Dk.-Gray | Glaze | ext. | Lead | Rust | 1 | 3 | saucer | flower pot |
| Rim/Body/Base | Buff | Glaze | int. & ext. | Salt | int.-Gray ext. Dk. Brown & Gold | | | | |
| Rim/Body/Base | Med.-Gray | Extremely Burnt | | | | 2 | | | |
| Neck/Shoulder | White | Glaze | int. & ext. | Lead | White | 1 | 5 | | |
| Shoulder | Buff | Glaze | ext. | Feldspar | Buff | 2 | | | |
| Body | Med.-Gray | Glaze | ext. | Lead | Rust | 2 | | | flower pot |
| Body | Buff | Glaze | int. & ext. | Salt | int.-Yellow, ext. Brown | 3 | | | preserves |
| Body | Buff | Glaze | int. & ext. | Salt | int.-Dk. Brown ext.-Buff | 1 | | bottle | |
| Body | Med.-Gray | Glaze | ext. | Lead | Rust | 1 | | | |
| Body | Med.-Gray | Glaze | int. & ext. | Lead | int.-Buff ext.-Lt. Brown | 1 | | | |
| Body | Buff | Glaze | int. & ext. | Lead | Golden Brown | 1 | | | |
| Body | Med.-Gray | Glaze | ext. | Salt | Rust/Brown | 1 | | | |
| Body | Buff | Glaze | int. & ext. | Lead | int.-Yellow, ext. Brown | 1 | | | |
| Body | Med.-Gray | Glaze | int. & ext. | Lead | int.-Rust/ Brown, ext. -Gold/Brown | 1 | | | |
| Body | White | Glaze | ext. | Lead | Lt.Brown | 2 | | | |
| Body | Med.-Gray | Glaze | int. & ext. | Lead | Dk. Brown | 1 | | | |
| Body | Med.-Gray | Glaze | ext. | Salt | Dk. Brown | 1 | | | |
| Body | Med.-Gray | Glaze | int. & ext. | Lead | int.-Buff ext.-Lt. Brown | 1 | | | |
| Body | Med.-Gray | Glaze | int. & ext. | Salt | int.-Lt. Brown, ext. -Buff | 1 | | | |
| Body | Buff | Glaze | int. & ext. | Lead | Buff | 1 | | | |
| Body | Extremely Burnt | | | | | 9 | | | |
| Body/Base | Med.-Gray | Glaze | int. & ext. | Lead | int.-Brown | 1 | | | preserves |
| Body/Base | Buff | Glaze | ext. | Lead | Golden Brn | 1 | | | |
| Body/Base | Buff | Glaze | int. & ext. | Salt | Golden Brn | 1 | | jar | |
| Body/Base | Buff | Glaze | ext. | Lead | White | 1 | | | |
| Body/Base | Med.-Gray | Glaze | int. & ext. | Lead | int.-Buff ext.-Lt. Brn | 1 | | | |
| Base | Buff | Glaze | ext. | Lead | Rust | 1 | | | |
| Unidentifiable | Med.-Gray | Extremely Burnt | | | | | | | |

| | |
|---|---|
| * Lt. = Light | int. = interior |
| Dk. = Dark | ext. = exterior |
| Med. = Medium | Brn. = Brown |

sherds in small quantities of the various patterns and represent refuse discarded in the area, possibly from later structures, such as the second blacksmith shop, constructed in the area after the post was enlarged in 1831. The reconstructed pearlware plate was found in the east palisade. Coarse stoneware consisted of one fragment of Bristol-style brown stoneware with a moulded relief design. This was found in the area around the later blacksmith shop.

### 1.2.2 Later Palisade

A large number (208) and variety of decorated ceramics were retrieved from the east, north and west palisades. Twenty-six different Copeland patterns were identified. Other manufacturers represented included Sampson and Bridgwood, Brown and Woodfield and nineteen unknown. The greatest variety of decorative techniques employed on ceramics of unknown manufacturers was found in the later palisades. These included stamped and banded, stamped, shell edge, sponged, moulded relief and underglaze transfer printed, underglaze transfer printed and banded, and underglaze transfer printed with overglaze hand painting ware. Maker's marks found included ten "Late Spode" and one each of "Opaque China", "____CHINA", and "____our". A
NTED
large number of coarse stoneware fragments, including Derbyshire-style brown stoneware, Bristol-style brown stoneware and flower pot fragments were found.

The various ceramics were scattered throughout the trenches with no one pattern appearing in any great quantity in one area and represent trench fill or refuse discarded along the palisade. The largest concentration of ceramics appeared in Sq. 40R03, in the western extension of the north palisade. The greatest quantity of ceramics was found in the west palisade, while the least amount was recovered from the east.

### 1.2.3 Stable

Very few ceramics, earthenware or coarse stoneware, were found in the actual stable area. Spode/Copeland patterns introduced in the 1830s and 40s were recovered. One non-Copeland maker's mark "____CHINA"
ANTE
was found. These ceramics were probably discarded along with those found in the early stockade area.

### 1.2.4 Early Blacksmith Shop

In addition to the large amount of metal recovered from this feature, numerous ceramics (109), mainly Copeland, were also retrieved. Eighteen Copeland patterns were identified with introductory dates as late as 1867. Other manufacturers represented included Sampson and Bridgwood, Wood and Brownfield, and twelve unknown. The unknown manufacturers' patterns consisted chiefly of banded and stamped designs popular in the mid 1850s, along with one pattern of underglaze transfer print with overglaze hand painting. All patterns found were present in small quantities and represented later fill from elsewhere on the site. Coarse stoneware consisted of a few fragments of Derbyshire-style brown stoneware and one unknown. The presence of large amounts of ceramics in the blacksmith shop was also noted at Lower Fort Garry (Sussman 1979:188).

### 1.2.5 Men's House

A small number (103) of ceramics were retrieved from the men's house. Thirteen Copeland patterns were identified and comprised 76.7% of the ceramics found in this structure. A number of the patterns found, such as Alhambra (1848) and Ruins (1848) were made by W.T. Copeland (1847-67). Also three "Copeland Late Spode" maker's marks were recovered. Others with earlier introductory dates may have been made by Copeland and Garrett, although all of these patterns found were also being made in the 40s, 50s and 60s. However, one reconstructed bowl, in the pattern "Aesop's Fables" had a Copeland and Garrett maker's mark on the base. Other manufacturers represented included Sampson and Bridgwood, Brown and Woodfield, Pinder, Bourne and Hope and four unknown. All of the patterns by unknown manufacturers were blue underglaze transfer printed. No stamped, sponged or banded patterns popular in the mid-1800s were found. No coarse stoneware was recovered from the feature. For a residential feature occupied a number of years, a greater quantity of ceramics would be expected. Probable explanations for this low quantity are: (1) that the residence was abandoned after a number of years and all ceramics except for broken or discarded ones were removed; (2) that after the feature was abandoned, the cellar was used for refuse and hence the presence of later ceramic patterns, i.e., "Alhambra" and "Ruins"; (3) that most of the food preparation and consumption took place in the kitchen and only a few vessels were brought over to the residence; and (4) a combination of the above.

### 1.2.6 Kitchen

The kitchen yielded the largest (704) and most varied collection of decorated ceramics and vessels. Both tableware and toiletware were represented. Earthenware produced by Copeland comprises the majority (77%) of the collection. Twenty-two different Copeland patterns were identified. Most were produced by W.T. Copeland (1847-67). The maker's mark "Late Copeland" appeared on the bases of these various patterns: "Lotus", "B772", "Alhambra", "Continental Views", "Portland Vase", "Lily", and "Rose Wreath". Although a number of the patterns found may have been produced by Copeland and Garrett (1833-47), no maker's marks of this period were found.

Other manufacturers represented included Sampson and Bridgwood, Wood and Brownfield and fifteen unknown. The variety of techniques employed on ceramics of unknown manufacturers included: banded, banded and stamped, underglaze hand painted, moulded relief, underglaze transfer printed with overglaze hand painting, and shell edge, which were popular in the mid 1800s. Maker's marks found included "Fibre", "Palmyra" and "SEASONS".

The majority of reconstructed vessels came from the kitchen. The tableware articles included: (1) plates (10", 9", 8½") in the patterns "Continental Views", "Portland Vase" and "Palmyra"; (2) four saucers in the patterns "Alhambra" and one in the pattern "Fibre"; (3) the mug and pitcher in the "Alhambra" pattern; (4) four bowls, one in the "Continental Views" pattern which had been mended and one in each of the following patterns, "B772", "Alhambra" and "Sponged"; (5) three teacups in the patterns "Lily", "Fibre" and Pattern #27; and (6) the sauce tureen in the "Lotus" pattern in mauve. Toiletware articles included: (1) a chamber pot and basin in the pattern "B772" and (2) a chamber pot in Pattern #18. There was one crossmend with a piece from the warehouse. Commercial containers and storage vessels were also well represented. The complete and partially reconstructed Derbyshire-style brown stoneware vessels which contained the various colours of paint as well as the other two small coarse stoneware vessels were found here. The remainder of the coarse stoneware fragments consisted of Bristol-style brown stoneware which would have been used for foodstuffs. One coarse rust coloured stoneware fragment from a flower pot was also found. The large quantity and variety of ceramics found would be expected in areas where food preparation and consumption activities occurred.

### 1.2.7 Factor's House

The factor's house yielded a large amount of decorated ceramics (406), second only to the kitchen. Twenty-one Spode/Copeland patterns were identified and make up 75% of the ceramics found. Most of the objects in this group were made by W.T. Copeland (1847-67) and consisted of tableware. The maker's mark "Late Copeland" appears on a number of fragments including the base of a bowl in the pattern B700. A number of these patterns may have been produced during the Copeland and Garrett period. Two maker's marks of this period (1833-47) were found, one on the base of a fragment decorated in the pattern "Fruit and Flowers" and one on the base of the serving dish in the pattern "Camilla".

Twelve fragments of the pattern "Portland Vase" which was expensive to produce due to the intricacies of the border were found in the factor's house as would be expected. Fragments of this pattern found at the post were few (34) and the remaining pieces were found in the kitchen, the early blacksmith shop and the warehouse. The pieces in the kitchen were reconstructed and represent a plate, while only two fragments were found in the warehouse. The remainder appear to be discarded in the early blacksmith shop.

Other manufacturers represented included Sampson and Bridgwood, Wood and Brownfield, Ridgway and fifteen unknown manufacturers. Decorative techniques found on the non-Copeland ceramics included sponged, stamped, banded and stamped, banded, and moulded relief -- designs and techniques all popular in the mid 19th century. Maker's marks found included "SAM_____", "Semi China" and "SEASONS".

A number of vessels were completely or partially reconstructed from pieces found. These consisted mainly of bowls in the following patterns: "B700" (1), "Strawberry" (1), "Ruins" (1), "B772" (2), "Flower Vase" (1), "Fibre" (1), and "Seasons" (1). Also the plain white earthenware panelled jar was recovered here.

Fragments of coarse stoneware found in the factor's house consisted mainly of Bristol-style brown stoneware fragments used for food substances and Derbyshire-style brown stoneware used for non-food substances, i.e., ink, blacking, etc. No complete or partial vessels were reconstructed.

### 1.2.8 Store

A substantial amount of decorated ceramics (245) was retrieved from this feature, mainly in the cellar area. Sixteen Spode/Copeland patterns were identified and represented tableware. Most of the objects in this group were made by W.T. Copeland (1847-67), including patterns with an earlier introductory date, i.e., Broseley. The maker's mark "Late Copeland" was found on a number of pieces. Although a number of these patterns may have been produced during the Copeland and Garrett period, there were no identifying maker's marks found. Other manufacturers represented were Sampson and Bridgwood and Wood and Brownfield. A variety of earthenware produced by unknown manufacturers were found. These included sponged, stamped, banded, banded and stamped, shell edge, and underglaze transfer printed with overglaze hand painted patterns. Non-Copeland maker's marks found included "THE SEASONS" and "MANDARIN".

A number of crossmends with pieces from the warehouse were made. These two structures were in close proximity to one another and it would not be difficult for fragments to be scattered within the two. Four pieces of coarse stoneware were recovered from the store. Substantial quantities of ceramics in a variety of patterns would be expected in trading and purchasing areas in order to provide customers with a choice.

### 1.2.9 Warehouse

The warehouse yielded a large amount (332) of ceramics in a variety of patterns. Twenty-four Copeland patterns were identified. Most were made by W.T. Copeland (1847-67), which would correspond to the date of the structure's construction after the fire of 1843. Although patterns with earlier introductory dates are present, these were all being produced throughout the 40s, 50s and 60s. However, one Copeland and Garrett (1833-47) maker's mark was found on the base with the pattern "Fruit and Flowers", in the hearth area. This probably represents an earlier piece still used at the time of the structure's existence. Other pieces with patterns introduced prior to 1847 may belong to this period. However, taking into account the construction date of the feature and the lack of Copeland and Garrett maker's marks, this would be difficult to ascertain.

Crossmends with pieces from the kitchen and particularly the store were made. Other manufacturers represented included Sampson and Bridgwood, Wood and Brownfield and sixteen unknown. The variety of decorative techniques employed on the earthenware of unknown manufacturers included stamped and banded, shell edge and underglaze transfer printed with overglaze hand painting. The few elaborate pieces of underglaze transfer print with overglaze hand painting, done in a number of colours were chiefly restricted to this structure. One maker's mark "Semi " was found.
China

Distribution of the ceramics in the warehouse consisted of a few fragments in various patterns scattered throughout the foundation, hearth and cellar areas with the largest concentration (22.5%) in the north cellar. This differs from the kitchen and the factor's house where the ceramics were concentrated in one main area. This scattering of ceramics throughout the warehouse with a concentration in the north cellar may be the result of a number of factors: (1) daily items, such as plates, cups, etc., used by the men may have been broken and discarded; (2) items in the cellar may represent stock which was damaged, either during shipment or after the collapse of the building; and (3) a number of fragments may represent refuse from previous structures in the area. Coarse stoneware, like the ceramics, was found in small quantities scattered throughout the foundations, hearth and cellars.

### 1.2.10 North Cellar

This cellar yielded a large number (225) and variety of decorated ceramics. Earthenware produced by Copeland comprises the majority (78.8%) of the collection. Twenty patterns were identified, most of which were produced by W.T. Copeland (1847-67). The maker's mark "Late Spode" was found on the base of a bowl in the pattern "B700". Seven additional "Copeland Late Spode" marks were present. Other manufacturers represented included Sampson and Bridgwood, Wood and Brownfield and twelve unknown. Decorative techniques on the unknown manufacturer's ceramics included sponged, stamped and banded. Non-Copeland maker's marks included "Palmyra", "Ironstone " and "_____re" (Fibre).
H & G Late Harvey

A number of vessels, completely or partially reconstructed, represent both tableware and toiletware. The tableware items included: (1) a pitcher in the pattern "Tower"; (2) a bowl in the pattern "Lily"; (3) a shallow bowl in the pattern "B700"; (4) a partially reconstructed bowl in the pattern "Rural Scenes" in red; (5) an elaborately decorated bowl of bone china in the pattern "Ship Border" with underglaze transfer print and overglaze hand printing. The toiletware item consisted of the mauve coloured soap dish in the "Lotus" pattern. The quantity and variety of ceramic patterns and vessels found indicated that this was a residence most likely occupied during the latter part of the post's existence and that the resident had some degree of status. It may represent one of the quarters used by the employees after the post had been abandoned in 1856.

Coarse stoneware consisted of two fragments of Bristol-style brown stoneware, probably from the same type of vessel which was used for food. Also the large Lambeth ware jug came from this cellar.

### 1.3 Glassware and Bottles

Glass articles found at Fort Pelly 1 represent various categories of type and function. The majority of glass pieces consists of fragments and, therefore, analysis is limited to colour and identifiable portions and possible shape of the article. In cases of complete or semi-complete articles, more detailed description is possible, including: (1) physical attributes and colour; (2) the mode of manufacture; (3) decorative techniques and designs including monograms and inscriptions; and (4) primary function and also secondary function where possible. Analysis of these attributes is mainly presented in illustrative form accompanied by descriptive text. Finishes were analyzed according to the classification presented in Putman (1965). A total of 717 fragments of glass (including those of reconstructed vessels) was recovered. These are listed in Table 16 by colour and identifiable portion. Table 17 gives the shape of the original article, where possible, along with the colour and identifiable portion.

TABLE 16

Glass Fragments: Colour by Identifiable Portion

| Identifiable Portion Colour | Not Identified | Rim | Finish | Neck | Body | Base | Neck/ Sh. | Sh./ Body | Stopper | Body/ Base | Panel | Finish/ Neck | Side Panel | Front or Back Panel | Side & Front Panel | Finish/ Sh./ Body/ Base | Finish/ Neck/ Shoulder | Foot/ Stem | Body Rim | Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clear | 32 | 3 | 6 | 2 | 168 | 9 | 3 | | 6 | 23 | 15 | 12 | 12 | 22 | | 2 | 3 | 3 | 19 | 2 | 342 |
| Dark Olive Green | 5 | | 2 | | 39 | 5 | | | | 2 | | 2 | | | | | 1 | | | | 56 |
| Amber/Brown | 4 | | | | 1 | | | | | | | | | | | | | | | | 5 |
| Green Tint | | | | | | | | | | | 1 | | | | | | | | | | 1 |
| Blue | 1 | 1 | 1 | | 5 | | 1 | | | 1 | 2 | 1 | | | | | | | | | 13 |
| Lt. Green Tint | 34 | | 9 | | 92 | 8 | | 2 | | 8 | 18 | 8 | 1 | 3 | | 1 | | | | | 184 |
| Lt. Aqua Tint | 5 | | 3 | 1 | 32 | | 1 | | | 8 | 8 | 3 | 20 | 6 | 3 | | | | | | 90 |
| Lt. Olive Tint | 2 | | | | 17 | | | | | 2 | | | | | | | | | | 1 | 22 |
| Opaque Blue | 1 | | | | | | | | | | | | | | | | | | | | 1 |
| Lt. Aqua Opaque | 1 | | | | 2 | | | | | | | | | | | | | | | | 3 |
| TOTAL | 85 | 4 | 21 | 3 | 356 | 22 | 5 | 2 | 6 | 44 | 44 | 26 | 33 | 31 | 3 | 3 | 4 | 3 | 19 | 3 | 717 |

Sh. = shoulder

TABLE 17

Glass Fragments: Vessel, Shape, Colour and Identifiable Portion

| Form | Identifiable Portion Colour | Rim | Finish | Body | Base | Rim/ Neck | Shoulder/ Body | Body/ Base | Panel | Side Panel | Front and/ or Back Panel | Finsh/ Neck | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Circular | Clear | 3 | 2 | 11 | 8 | 1 | | | | | | | 25 |
| | Dk. Olive Green | | | 28 | 3 | | | | | | | | 31 |
| | Lt. Green Tint | | | 13 | 4 | | 1 | 1 | | | | | 19 |
| | Lt. Aqua Tint | | | 3 | | | | | | | | | 3 |
| | Lt. Olive Tint | | | 2 | | | | | | | | | 2 |
| | TOTAL | 3 | 2 | 57 | 15 | 1 | 1 | 1 | | | | | 80 |
| Rectangular | Clear | | | | | | | | 8 | 1 | 1 | | 10 |
| | Dk. Olive Green | | | | 2 | | | | | | | | 2 |
| | Green Tint | | | | | | | | 1 | | | | 1 |
| | Blue | | | | | | | 1 | 1 | | | | 2 |
| | Lt. Green Tint | | | 1 | 3 | | | 1 | 15 | 1 | 1 | | 22 |
| | Lt. Aqua Tint | | | 1 | | | | 1 | 5 | | | | 7 |
| | TOTAL | | | 2 | 5 | | | 3 | 30 | 2 | 2 | | 44 |
| Square | Lt. Aqua Tint | | | | | | | | | | | 1 | 1 |
| Polygonal | Lt. Aqua Tint | | | | | | | 1 | | | | | 1 |
| Rectangular and/or Square | Clear | | | 4 | | | | | | | | | 4 |
| | Blue | | | | | | | | 1 | | | | 1 |
| | Lt. Green Tint | | | 9 | | | | | 1 | | | | 10 |
| | Lt. Aqua Tint | | | 3 | | | | | 2 | | | | 5 |
| | TOTAL | | | 16 | | | | 1 | 4 | | | | 21 |

### 1.3.1 Pharmaceutical and Toiletry Bottles

A number of various pharmaceutical bottles (Fig. 68) was found. However, the majority consist of Turlington's Balsam of Life; Essence of Peppermint; and Perry Davis Pain Killer. Turlington's Balsam of Life and Essence of Peppermint were both manufactured in England. Turlington's Balsam of Life was patented in London in 1744 and sold in America until amost 1900 (Munsey 1970:65). The bottles are pear shaped and heavily embossed with the inscription "BY THE KINGS ROYAL PATENT GRANTED TO" on one side, and "ROBT TURLINGTON FOR HIS INVENTED BALSAM OF LIFE" on the other (Fig. 69). The date is on one side panel and "LONDON" on the other. A total of 39 fragments of various parts of these bottles was found. One broken bottle was recovered in the store.

Essence of Peppermint was patented in England in 1762 by John Juniper (Jones 1981:5). The bottle consists of a square vial with the embossed inscription "BY THE/KINGS PATENT/ESSENCE OF/PEPPERMINT". This distinctive bottle was introduced some time between 1767 and 1790 and produced until the 1920s (Jones 1981:31). A total of 20 fragments of these bottles was found. Two semi-complete specimens were recovered in the kitchen (Fig. 69). Turlington's Balsam of Life and Essence of Peppermint appear regularly in the account journals of Fort Pelly (HBCA, PAM, B. 159/d/37a, fo. 3; B. 159/d/16, fo. 8; B. 159/d/7, fo. 6d).

Perry Davis Pain Killer was invented in America by Perry Davis in 1840 and quickly gained in popularity (being 51% alcohol) (Munsey 1970: 68). The product was widely distributed and a branch office was also established in London in the 1850s. The bottle is rectangular in shape with "DAVIS PAIN KILLER" embossed on the front and "VEGETABLE" and "PAIN KILLER" on the other narrower side panels. A total of 32 fragments of various parts of these bottles was found. No complete or semi-complete bottles were found or reconstructed.

Four toiletry bottles were found, and these are illustrated in Fig. 68.

### 1.3.2 Pressed Design Articles

#### Tableware

The two semi-complete stemware wine glasses (Fig. 70) found are representative of those produced in the 19th century. At this time glass manufacturers were cutting production costs, by pressing the glass into the shape of the completed article, so that the facets merely required sharpening and finishing off (Percival n.d. 125). The results were much the same as those of cut glasses popular towards the end of the 18th century and beginning of the 19th century (Percival n.d. 123-125). Pressed designs are also present on the decanter, a small glass, (Fig. 69) the tops of two stoppers and on the base of one

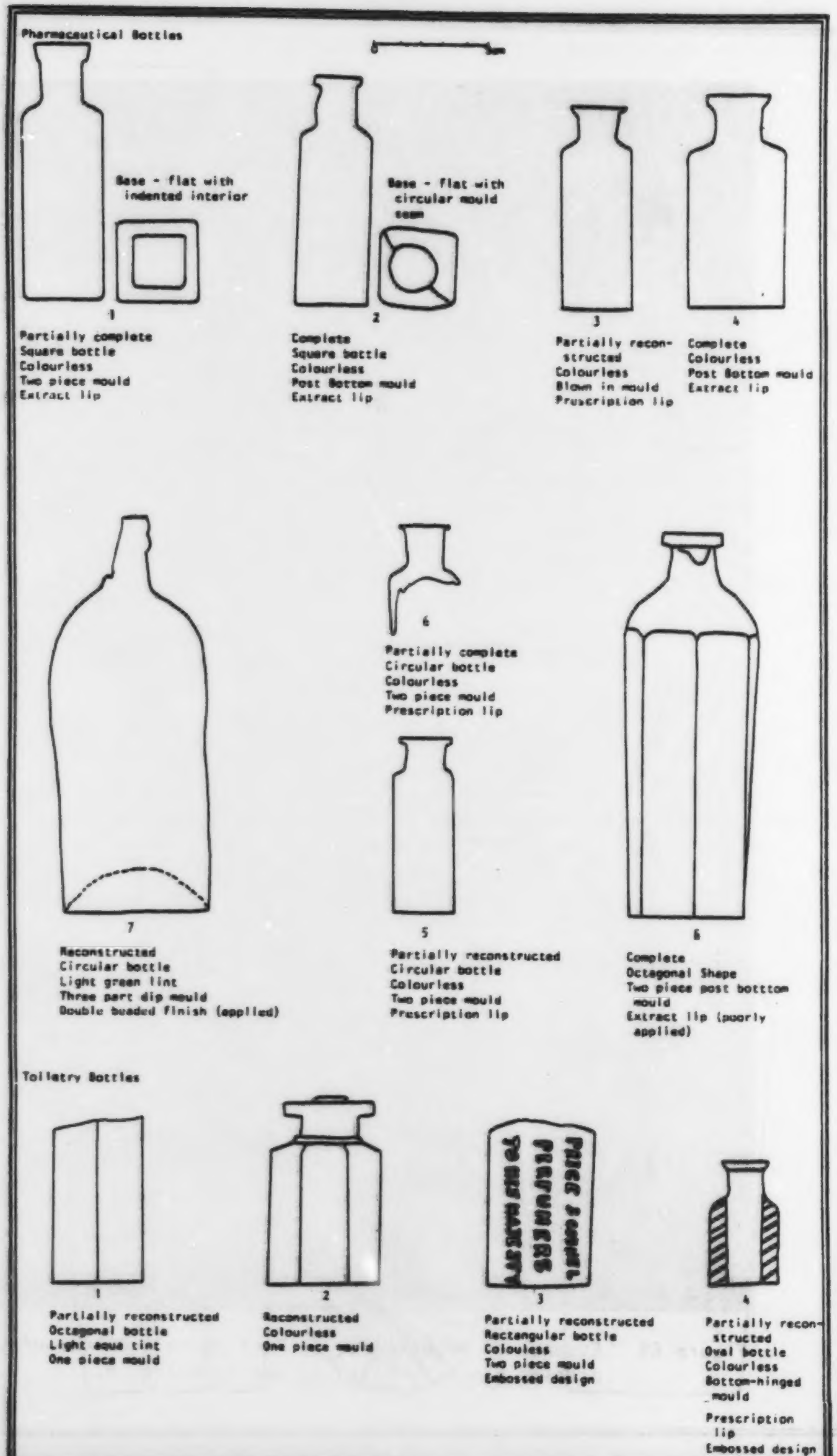

Pharmaceutical Bottles
0
5cm
Base - flat with indented interior
1
Partially complete
Square bottle
Colourless
Two piece mould
Extract lip
Base - flat with circular mould seam
2
Complete
Square bottle
Colourless
Post Bottom mould
Extract lip
3
Partially recon-structed
Colourless
Blown in mould
Prescription lip
4
Complete
Colourless
Post Bottom mould
Extract lip
7
Reconstructed
Circular bottle
Light green tint
Three part dip mould
Double beaded finish (applied)
6
Partially complete
Circular bottle
Colourless
Two piece mould
Prescription lip
5
Partially reconstructed
Circular bottle
Colourless
Two piece mould
Prescription lip
8
Complete
Octagonal Shape
Two piece post botttom mould
Extract lip (poorly applied)
Toiletry Bottles
1
Partially reconstructed
Octagonal bottle
Light aqua tint
One piece mould
2
Reconstructed
Colourless
One piece mould
PRICE & GOSNELL
PERFUMERS
TO HER MAJESTY
3
Partially reconstructed
Rectangular bottle
Colouless
Two piece mould
Embossed design
4
Partially recon-structed
Oval bottle
Colourless
Bottom-hinged mould
Prescription lip
Embossed design

Figure 68. Pharmaceutical and Toiletry Bottles.

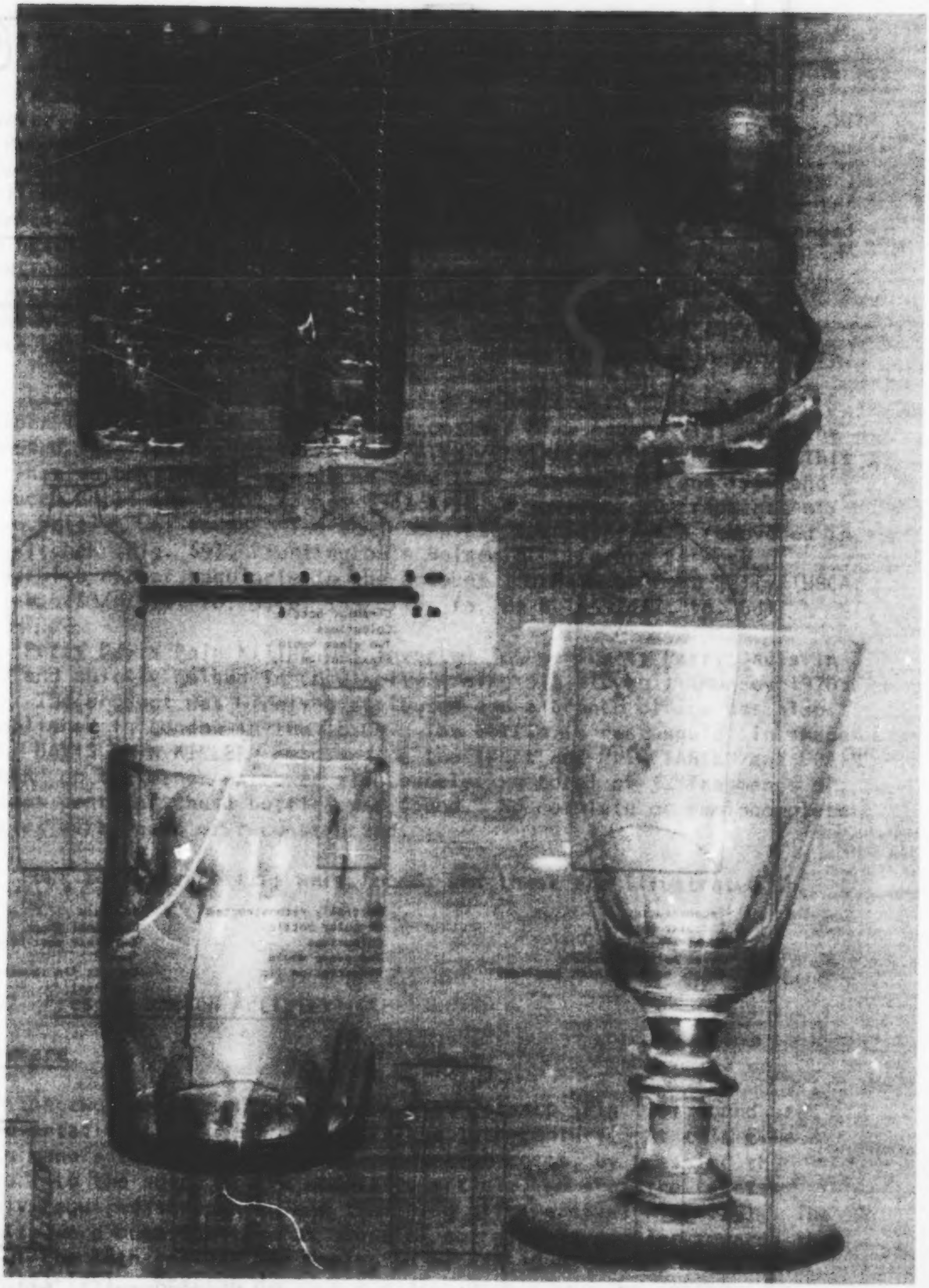


Figure 69. Essence of Peppermint, a; Turlington's Balsam of Life, b; pressed glass tumbler, c; and stemware, d.

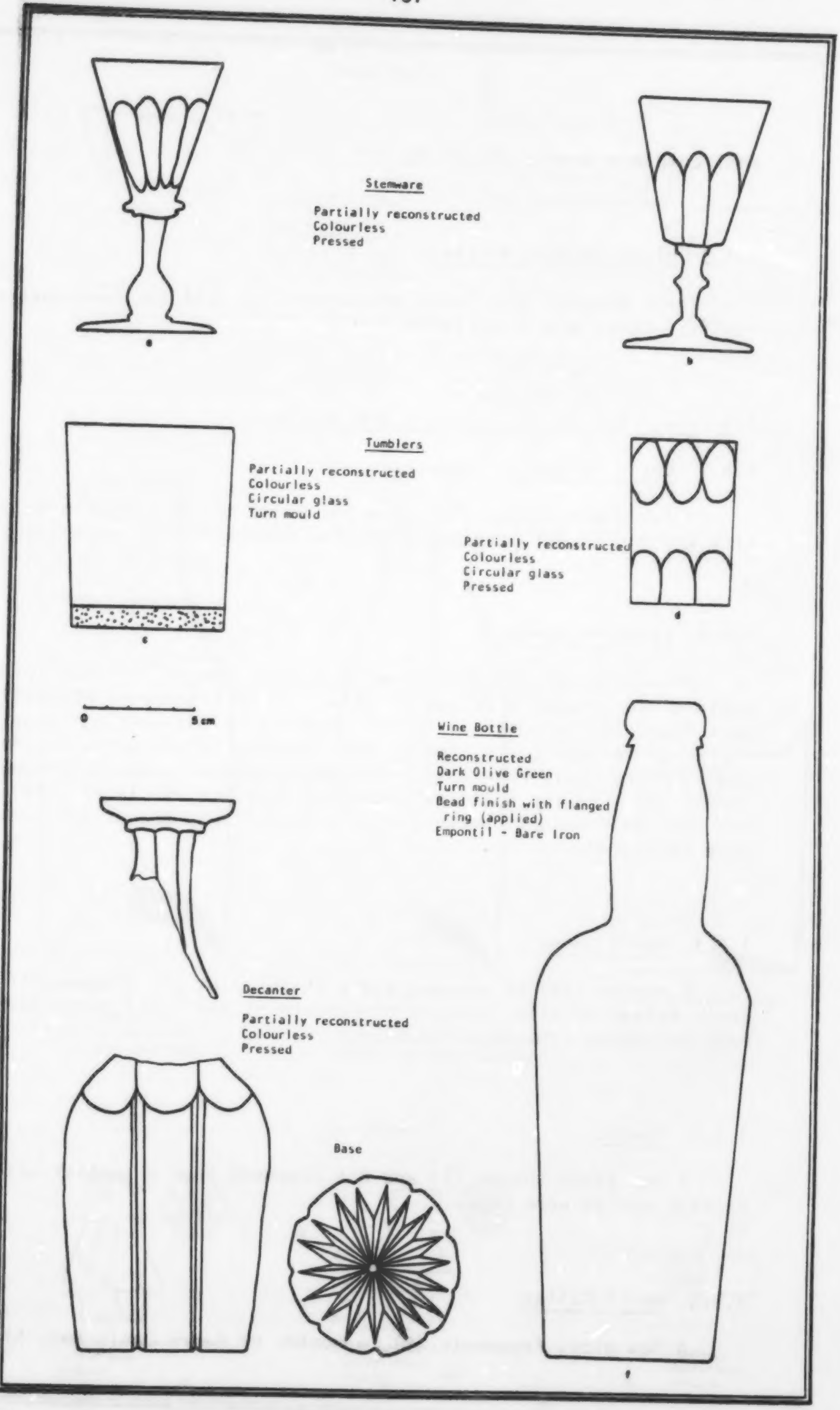

Stemware
Partially reconstructed
Colourless
Pressed
a
b
Tumblers
Partially reconstructed
Colourless
Circular glass
Turn mould
c
Partially reconstructed
Colourless
Circular glass
Pressed
d
0
5 cm
Wine Bottle
Reconstructed
Dark Olive Green
Turn mould
Bead finish with flanged ring (applied)
Empontil - Bare Iron
f
Decanter
Partially reconstructed
Colourless
Pressed
Base

**Figure 70.** Stemware, Tumblers, Decanter and Wine Bottle.

semi-complete bottle (Figs. 70, 71).

### 1.3.3 Miscellaneous Bottles

Three bottles were found which could be used for beverages or food stuffs. These are illustrated in Fig. 71.

## 1.4 Distribution of Glassware and Bottles

### 1.4.1 Early Palisade

A few glass sherds (17) plus one panel of Turlington's Balsam of Life and a circular base and stem of a stemware glass were found here.

### 1.4.2 Later Palisade

Besides a number (91) of various glass sherds, a number of fragments of Turlington's Balsam of Life (3) and Essence of Peppermint (1) were found in the north palisade. Remains in the west palisade consisted of various glass sherds, two finishes formed by turning the rim under, Perry Davis Pain Killer fragments and two complete stoppers (Style #3). In the south palisade two complete (Style #2 & #4) and one partially reconstructed (Style #1) small pharmaceutical bottles were recovered.

### 1.4.3 Men's House

A number (24) of various glass sherds plus one fragment of Turlington's Balsam of Life, Essence of Peppermint and Perry Davis Pain Killer, were recovered from this structure.

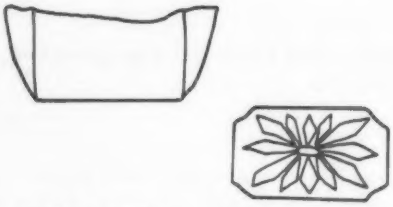
### 1.4.4 Stable

A few glass sherds (3) and one fragment from a tumbler with a pressed design were found.

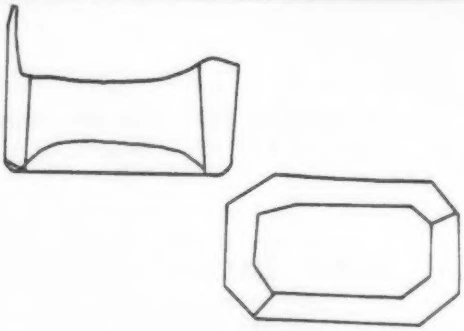
### 1.4.5 North Cellar

A few glass fragments (9), a number of Perry Davis Pain Killer

Pressed Bottles

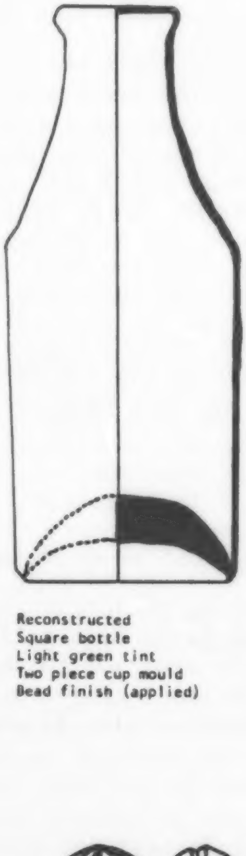


Partially complete
Rectangular bottle
Colourless
Pressed

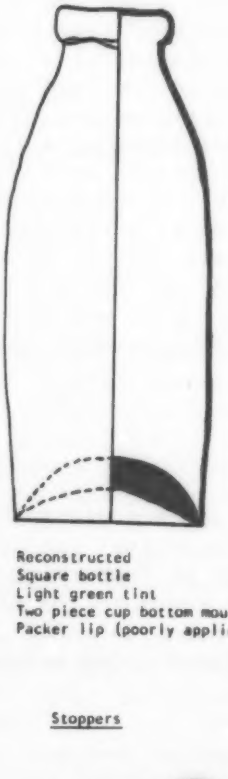


Partially complete
Rectangular bottle
Light green tint
Post bottom mould

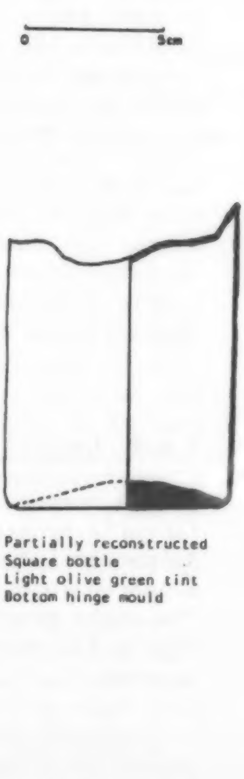
Miscellaneous Bottles



Reconstructed
Square bottle
Light green tint
Two piece cup mould
Bead finish (applied)

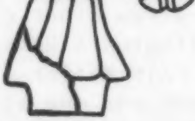


Reconstructed
Square bottle
Light green tint
Two piece cup bottom mould
Packer lip (poorly applied)

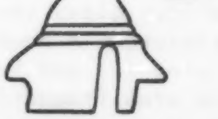


Partially reconstructed
Square bottle
Light olive green tint
Bottom hinge mould

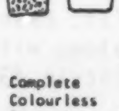
Stoppers



Partially reconstructed
Colourless
Pressed



Semi-complete
Colourless
Pressed



Complete
Colourless
Pressed

Figure 71. Pressed Bottles, Miscellaneous Bottles and Stoppers.

fragments (3), and the body and basal portion of the pressed bottle (Style #2) were found in this structure.

### 1.4.6 Store

Glass remains consisted of a variety of glass sherds (45) plus: a number of Turlington's Balsam of Life (9); one sherd of Essence of Peppermint; one sherd of Perry Davis Pain Killer; and the brown body and base of a wine bottle.

### 1.4.7 Kitchen

The majority (52) of glass sherds and various glass articles found at Fort Pelly I was recovered from the kitchen. The small and large tumblers, the stemware glasses plus the decanter, the wine bottle and the large bottles employed for food or beverages were found here. In addition to the glass articles and containers associated with food and beverage consumption and storage, a large number of pharmaceutical and toiletry bottles and fragments were also found in the kitchen. Turlington's Balsam of Life (6), Essence of Peppermint (10) and Perry Davis Pain Killer (10) were equally represented along with three small pharmaceutical bottles (Styles #3, 5, 6) and a pressed bottle (Style #1). Toiletry items included the "PRICE & CONNELS PERFUMERS", the octagonal bottle with the stopper (#2), and the small oval bottle (Style #4). Three styles of stoppers were also recovered from this feature.

### 1.4.8 Factor's House

A number (46) of various glass sherds were recovered from the factor's house. Pharmaceutical remains consisting of Turlington's Balsam of Life, Essence of Peppermint and Perry Davis Pain Killer appeared in quantities equal to the kitchen. In addition to these, the sherd bearing the name "BARNARDS", plus the small toiletry bottle (Style #1) were also found. One stopper fragment (Style #3) was recovered.

### 1.4.9 Warehouse

In addition to various glass sherds (50), a few other glass items were found in this structure. A number of Turlington's Balsam of Life (2), Essence of Peppermint (2) and Perry Davis Pain Killer (4) sherds along with the base and stem fragment of stemware and one stopper (Style #3) were represented.

## 1.5 Cutlery

### 1.5.1 Spoons

Spoons were not used as regular eating implements until the late 1600s. The first short-handled spoons were grasped in the fist. These gave way to a more elegant handled form which was held between the fingers (Singleton 1970:4). A total of five spoons and two handle fragments made of a ferrous metal was found at Fort Pelly 1. Four of the five are teaspoons while the fifth would most likely have been a serving spoon. All have the characteristic ovoid bowl shape popular in the 19th century. Two of the teaspoons are complete, although one is bent, and measure 14.5 cm in length and the handles have a slightly rounded end, 1.5 cm in width. The other two teaspoons consist of the bowl and upper handle portion. On the back of one of the bowls at the base, there is a design done in relief consisting of petals forming a fan (Fig. 72). On the second teaspoon, a rounded knob (2 mm in diameter) is present on the handle 4 mm below the bowl (Fig. 72). The large bowl fragment found is made of a ferrous metal and measures 8 cm in length and 5.2 cm at its widest point. The two handle fragments found are made of a ferrous metal and are quite large, measuring 16 cm and 15.5 cm in length with slightly rounded ends 2.8 cm and 2.2 cm wide respectively.

### 1.5.2 Forks

A total of six forks, complete and fragmentary, was found at the post. Forks were not adapted for general eating purposes until the mid to late 1600s and before that, they were used only as carving tools in the preparation of food (Singleton 1970:4). Two-pronged forks were the first type introduced and remained popular until Victorian times, although three or four pronged were made intermittently during the 18th century (Singleton 1970:4). The five forks recovered are made of a ferrous metal and have three prongs. They are typical of the early 19th century having square shoulders. The one complete specimen (Fig. 72) measures 20 cm in length with the tines being 7 cm long and the handle 8.5 cm and the intervening shaft 4 cm. The handle is made of bone decorated by incised parallel diagonal lines and is attached to the fork by two iron rivets. One other fork, complete except for one tine, is identical to the one just described. The remaining fork fragments are similar to the complete one and include: a complete fork, except for the tips of the tines and the bone handle (there are three rivets instead of two for the handle); tines; tines and the shaft; and a complete fork with part of the handle broken.

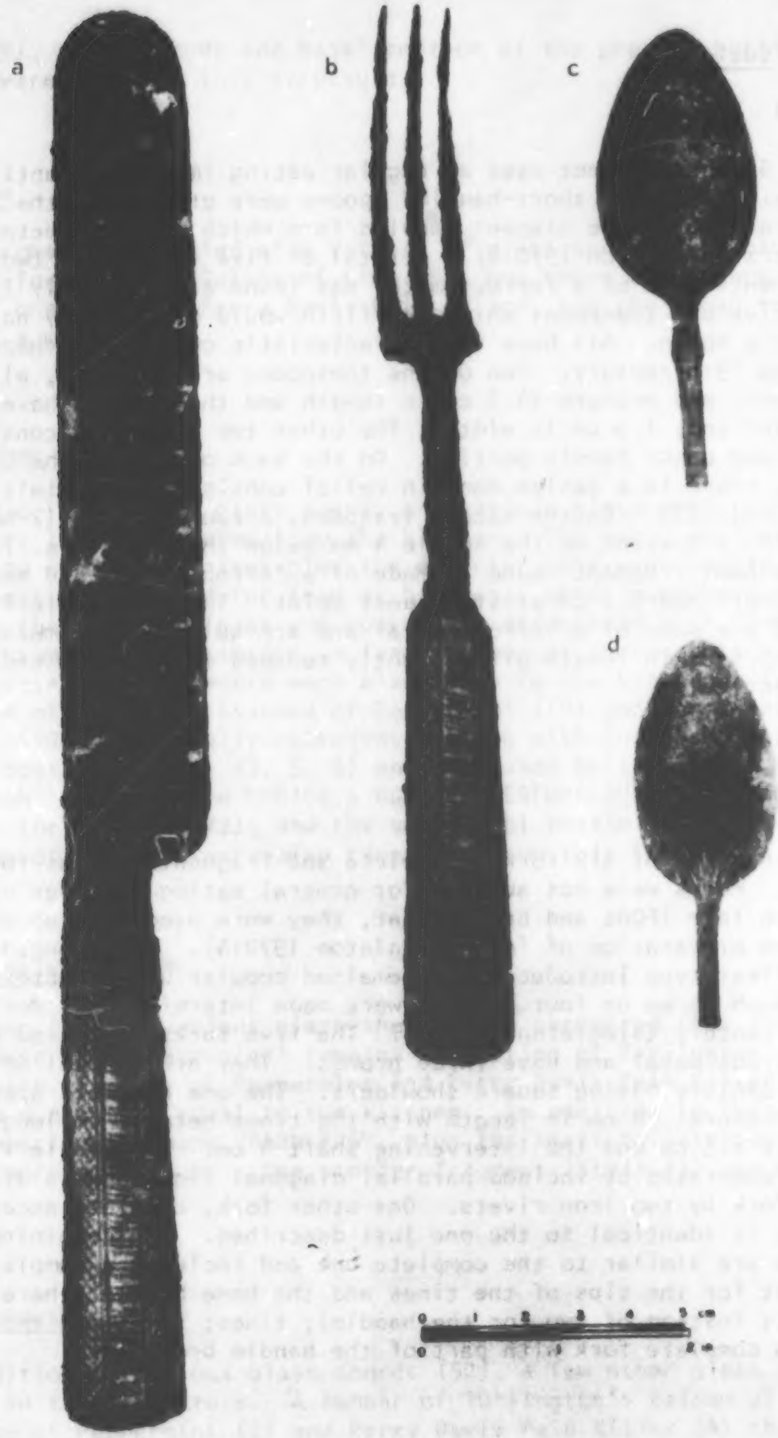


Figure 72. Cutlery: Knife, a; Fork, b; Teaspoons, c & d.

### 1.5.3 Knives

Knives found at Fort Pelly 1 represent both table and "butchering" knives. All are made of ferrous metal and are extremely corroded, except for one tip fragment of a butchering knife.

A total of four table knives, one complete, two semi-complete, and one metal handle terminal was recovered. The complete specimen (Fig. 72) measures 27.5 cm in length with the handle being 10.5 cm. The blade has straight parallel sides and is relatively wide, 2.5 cm, with a semi-circular tip. A bone handle with a cross-hatch design is attached by three rivets to the knife. This is typical of the knives described by Kidd (1972:45) and Singleton (1970:3) for the period 1825-1850. According to Singleton (1970:3), the knives had "an uncompromisingly straight parallel side blade, about 6 inches [15 cm] long and 1 inch [2.5 cm] wide, with a semi-circular tip and a deep rounded heel". The handles were made of ivory, wood or pressed horns and were also straight with a rounded or square cut end. It frequently consisted of two scales riveted to a flat tang (Singleton 1970:3). The three fragments are similar to the complete specimen.

"Butchering" knives are represented by: one semi-complete knife (wooden or bone handle missing); two pointed-tip fragment; three metal handle terminals and one blade. The semi-complete knife measures 19 cm in length with the handle being 5.5 cm. The blade has a pointed tip and is 2 cm wide. The blade widths of the remaining fragments range between 2.5 to 3.5 cm, and represent a much larger knife.

## 1.6 Distribution of Cutlery

Distribution of the cutlery was mainly restricted to the warehouse, factor's house, kitchen, store and North cellar. The majority of spoons and fragments were recovered from the warehouse along with one fork fragment. No knife parts were found. The largest number of knives, four "butcher" knife fragments and one semi-complete fork (missing bone handle and tip of tines) came from the factor's house. Items found in the kitchen were few and consisted of one "butcher" knife handle fragment, the complete fork with the bone handle and the tines of a second fork. The complete table knife with the bone handle, a complete fork except for the part of the handle and a teaspoon were found in the store. Three knife fragments, two table and one "butcher", were found in the North cellar. The remaining knife fragments (2) were located in the men's house and the later west palisade. Spoon fragments were also found in the early blacksmith shop and west of the ash pits (Mis - 2). One complete fork, except for one tine, was also found in the early west palisade.

## 1.7 Miscellaneous Household Items

### 1.7.1 Cup (Gray Metal)

One cup with a handle and made of a gray metal was found. It is badly corroded and fragmented, however, its height and diameter can be roughly determined. It is 10.5 cm high and has a diameter of 8.5 cm.

### 1.7.2 Handles

Two types of handles were found, those belonging to containers, cups, etc., and furniture handles. A total of six handle fragments belonging to containers was present. They are all made from a strap of gray metal varying in width and thickness between 1.23 cm to 2.5 cm and .16 mm to 2.2 mm respectively. Eight handles of various shapes belonging to pieces of furniture were recovered. The majority (5) are rectangular in shape and made either from a round wire, 3 mm to 5 mm in diameter, of ferrous metal or a flat rectangular strap of ferrous metal, 1.4 cm wide and 3.5 mm thick. They ranged in length from 4.5 cm to 8 cm. Two handles are oval in shape and made from a round wire, 3.6 mm in diameter, of ferrous metal. These are 7.2 cm and 8.3 cm long. One extremely mangled handle fragment was found for which no shape could be determined.

### 1.7.3 Serving Tray

The serving tray found is made of a gray metal, probably pewter, and is oval in shape, measuring 21 cm by 17 cm. A decorated strip of gray metal is applied around the edge of the tray.

## 1.8 Distribution of Miscellaneous Household Items

Container handles were found in the warehouse (1), factor's house (1), store (3) and west palisade (1). Furniture handles were recovered in the factor's house (1), store (2), west palisade (4), and early east palisade (1). The cup was found in the kitchen, while the serving tray was found in the north warehouse cellar.

# APPENDIX 2

# PERSONAL, CLOTHING AND SOCIAL/LEISURE ARTIFACTS

## 2.1 Personal Artifacts

### 2.1.1 Pipes

Pipe fragments represent one of the largest groups of artifacts found at Fort Pelly 1. My analysis of the pipe fragments focuses on material, colour, identifiable portion, shape of bowl (if possible), manufacturer's marks or initials, and decorative design elements. Pipes found at the post are made of a variety of materials (Table 18), but the white clay pipe imported from Britain are the most common. Of the 4078 pipe fragments recovered, 99% are of the white clay type. These include fragments of pipe stems, pipe bowls, spurs and combinations of these.

#### White Clay Pipes

A total of 4041 white clay pipe fragments was found representing various parts of the pipe (Table 18). Detailed studies concerning the history and manufacture of white clay pipes have been presented by Walker (1977) and Oswald (1961, 1975). The purpose of the present discussion, therefore, is to formally describe the specimens recovered at Fort Pelly 1 in terms of their variation.

#### Pipe Stem Fragments (Stem and Mouthpiece Fragments)

The majority (61%) of white clay pipe fragments found consist of stem fragments in varying lengths. No complete pipe stems were found and the majority (99.9%) are plain and undecorated. Decoration occurs on two fragments. A moulded vine and leaf design is present on one pipe stem (Fig. 73a).

The other pipe stem fragment (Fig. 73b) has "GLASCOW" impressed on one side and the name "MURRAY" on the other. This is probably a product of William Murray and Co., a firm in Glasgow, which produced pipes from 1830-61. They are noted by Oswald (1975:205) as being exporters to America and dealing with the HBC.

Apart from designs and manufacturer's marks, pipe stems are of minor diagnostic value. Harrington (1954) proposed a system, which was later expanded and refined by Binford (1961), for measuring the bore diameters of pipe stems in order to determine their period of manufacture. Basically Harrington was able to demonstrate that from ca. 1620 to ca. 1800 the bore diameter of stems found on English pipes

TABLE 18

Pipes: Breakdown by Material and Identifiable Portion

| Identifiable Portion \ Material | White Clay | Porcelain | Earthenware | Gray Clay | Steatite | Pipestone | Soapstone | Catlinite | Raw Total |
|---|---|---|---|---|---|---|---|---|---|
| Bowl | 64 | 2 | 1 | | 1 | 1 | 2 | | 71 |
| Stem | 2185 | | | | | | | | 2186 |
| Spur | 9 | | | | | | | | 9 |
| Bowl/Spur/Stem | 83 | | | | | | | | 83 |
| Spur/Stem | 55 | | 1 | | | 1 | | | 57 |
| Bowl/Spur | 32 | | | | | | | | 32 |
| Bowl/Stem | 46 | 3 | | 1 | | | 1 | | 51 |
| Mouthpiece | 284 | 1 | | | | | | | 285 |
| Bowl Fragments | 1236 | 6 | | 9 | | 3 | | 3 | 1257 |
| Bowl/Stem/Spur Juncture Column | 47 | | | | | | | | 47 |
| TOTALS | 4041 | 12 | 2 | 10 | 1 | 6 | 3 | 3 | 4078 |

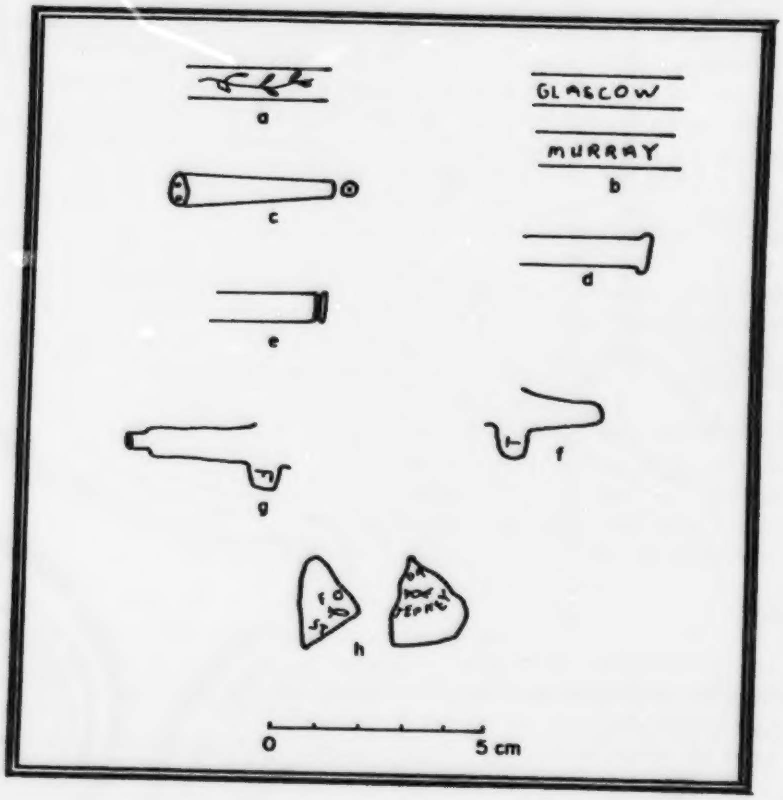

a
GLASGOW
MURRAY
b
c
d
e
f
g
h
0
5 cm

Figure 73. Pipe stems and mouthpiéces and "Ford Stepney" bowl marks.

found in North American sites decreased quite regularly. However, after this time the results became too inaccurate to use (Walker 1977: 9). Because the years of Fort Pelly's occupation are known to fall outside the significant time period of the Harrington/Binford system, the bore diameters were not measured. One stem fragment has two bore holes near the bowl juncture and only one hole at the other end (Fig. 73c).

Of the 2469 pipe stem fragments found, 284 represent mouthpieces. The most common (272) consist of mouthpieces that gradually taper. Eleven mouthpieces were found which have a flaring lip (Fig. 73d) similar to the one illustrated by Walker (1977:Fig. 117), and noted as being common on pipes made in France and Germany in the 19th century (Walker 1977:1674). One mouthpiece (Fig. 73e) neither tapers nor has a flaring lip. The mouthpiece is the same diameter as the rest of the stem and has two lines incised around the end.

A number of modifications on pipe stems were noted. The most common, found on 34 examples, is the reworking or refashioning of the stem to form a tapering mouthpiece (Fig. 73f). Often the stem is reworked to within a short distance from the bowl, necessitating the insertion of a holder made of wood, ivory, etc. One stem is reworked differently from the rest. In this case, the broken end is made uniformly narrow for a length of 4 mm (Fig. 73g) possibly for insertion into a holder as the stem fragment is only 25 mm from the bowl. A second modification that was noted is the presence of a red stain, possibly ochre or wax on 5 of the pipe stems.

### Pipe Bowls

A total of 1510 clay bowl fragments, some with spurs and stems, was recovered. The majority (82%) are too fragmentary to allow any conclusive observations or identification. However, a number of specimens provide information on bowl shape, decoration and manufacturer's marks.

### Shapes

Typologies showing the evolution and chronology of English clay pipes have been attempted by Oswald (1961) and others (Atkinson 1964; Parsons 1964; Noel-Hume 1963). The typology reissued by Oswald in 1961 is employed in the analysis of the Fort Pelly pipe bowls. However, note should be made of Oswald's (1975:38) observation that a great variety of shapes were produced in the middle and latter parts of the 19th century, so that a general typology is of little use. Basically the bowls fall within the range of Oswald's Type 11 and Type 12. The most common bowl shape found is Type 11b (Fig. 74) which Oswald (1961:61) notes as being a product of the late 18th century and first half of the 19th century. He continues to state that this type of pipe was made by a number of firms including John Ford of Stepney, working in 1832, and that this shape persisted well into the 19th

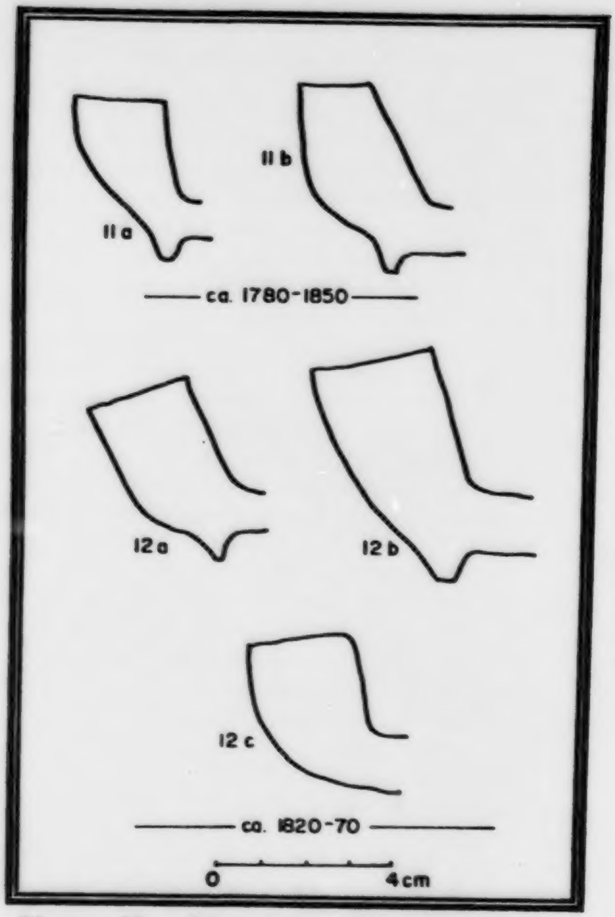

11 a
11 b
ca. 1780-1850
12 a
12 b
12 c
ca. 1820-70
0
4cm

Figure 74. Bowl Types (Oswald 1961).

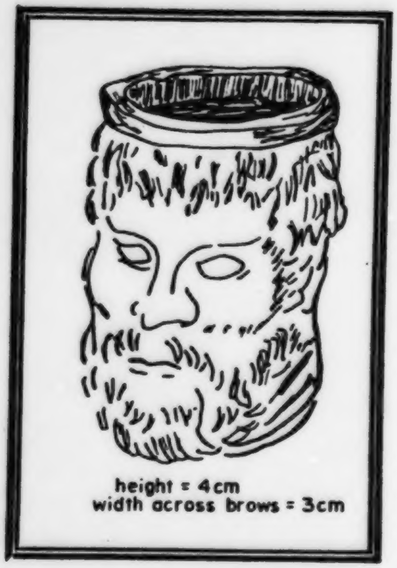

height = 4cm
width across brows = 3cm

Figure 76. Effigy pipe Bowl.

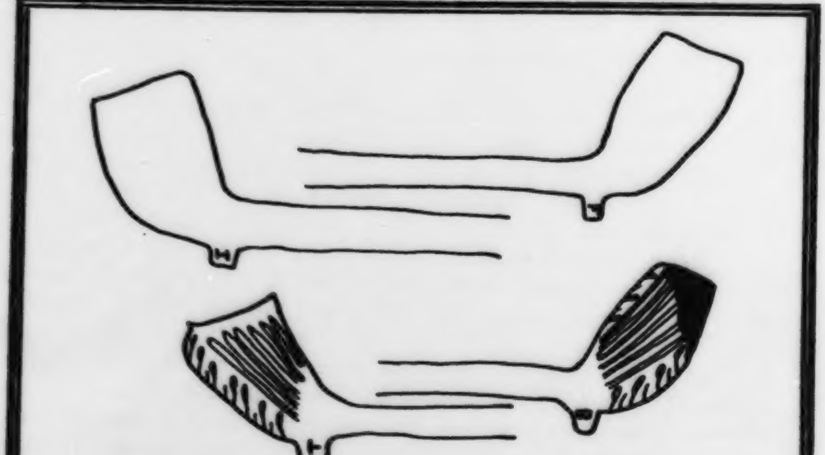


Figure 75. Pipes with initials "IF" and "TB" on the spurs.

century. The initials "IF" (Fig. 75) used by the John Ford firm, are found on 165 pipe fragments. The firm was based in East London and was founded in 1810 and continued until 1909. They were suppliers of clay pipes to the HBC from 1831 to at least 1870 (Walker 1972:11). Also two pipe bowl fragments have the name Ford/Stepney stamped on them (Fig. 73h). One of these "IF" pipe bowls contains the remains of the tobacco used. One "IF" pipe is almost complete and differs from the rest in that a leaf-vine design is present on the front and back seam. Two pipe bowl/stem fragments which closely correspond to Oswald's Type 12b and c (Fig. 74) were also recovered.

Decoration is present on 239 pipe bowl fragments. Two varieties are encountered. The first includes an "elaborately modelled head" (Fig. 76) of a male figure. The one example recovered consists only of the bowl and has no identifying marks present. Walker (1977:23) notes that "countless varieties of decorated bowls, including ones with elaborately modelled heads", were being manufactured in the 19th century and could depict popular topics, events or figures from history, fiction, mythology, etc. The second variety, which is more common (236), consists of moulded lines (ranging in number from 4-6; 6 being the usual number) on the sides of the bowl with a leaf and vine design along the front and back seams (Figs. 75, 77). The spurs on these decorated bowls bear the initials "TB". These initials can stand for a number of firms (Table 19) which produced pipes during the period of Fort Pelly 1.

Oswald (1975) notes that during the 19th century, the main sources of British pipes in America were London, Bristol, Liverpool and Glasgow. Minor and secondary sources included Broseley, Hampshire, Chester and possibly Hull. On this basis, the London firms of Thomas Balme (1805-45) and Timothy Berrington (1835) and the Liverpool firm of Thomas Birchall (1816-45) appear as the most likely suppliers of these decorated pipes. Oswald (1975) does not list these firms as being exporters to America. However, his list is not exhaustive and this possibility should not be excluded.

A number of "IF" (5) and "TB" (1) pipe bowl/spur/stem portions were found whose stems are re-tapered to within short distances from the bowl, necessitating, in some cases, the use of a holder. The longest re-worked stem measures 33 mm to the bowl while the shortest measures 11 mm. Sixteen other bowl/stem/spur fragments have stems which have been reworked. Two pipe bowl/stem fragments of unknown manufacturers also showed evidence of the stem being re-tapered. In one case, the reworked stem measures only 6 mm.

Spurs or heels under the bowls at their junction are evident on 22 bowl/spur, 55 stem/spur, 83 bowl/spur/stem and 47 bowl/spur/stem juncture fragments. From the 17th century onwards, pipes with smaller heels, spur-heels, short blunt spurs, long pointed spurs or no heel at all existed (Walker 1977:13). The earliest spurs and heels (ca. 1620- to the end of the 1600s) were large enough to take the maker's name or initials. By the end of the 17th century and the beginning of the 18th

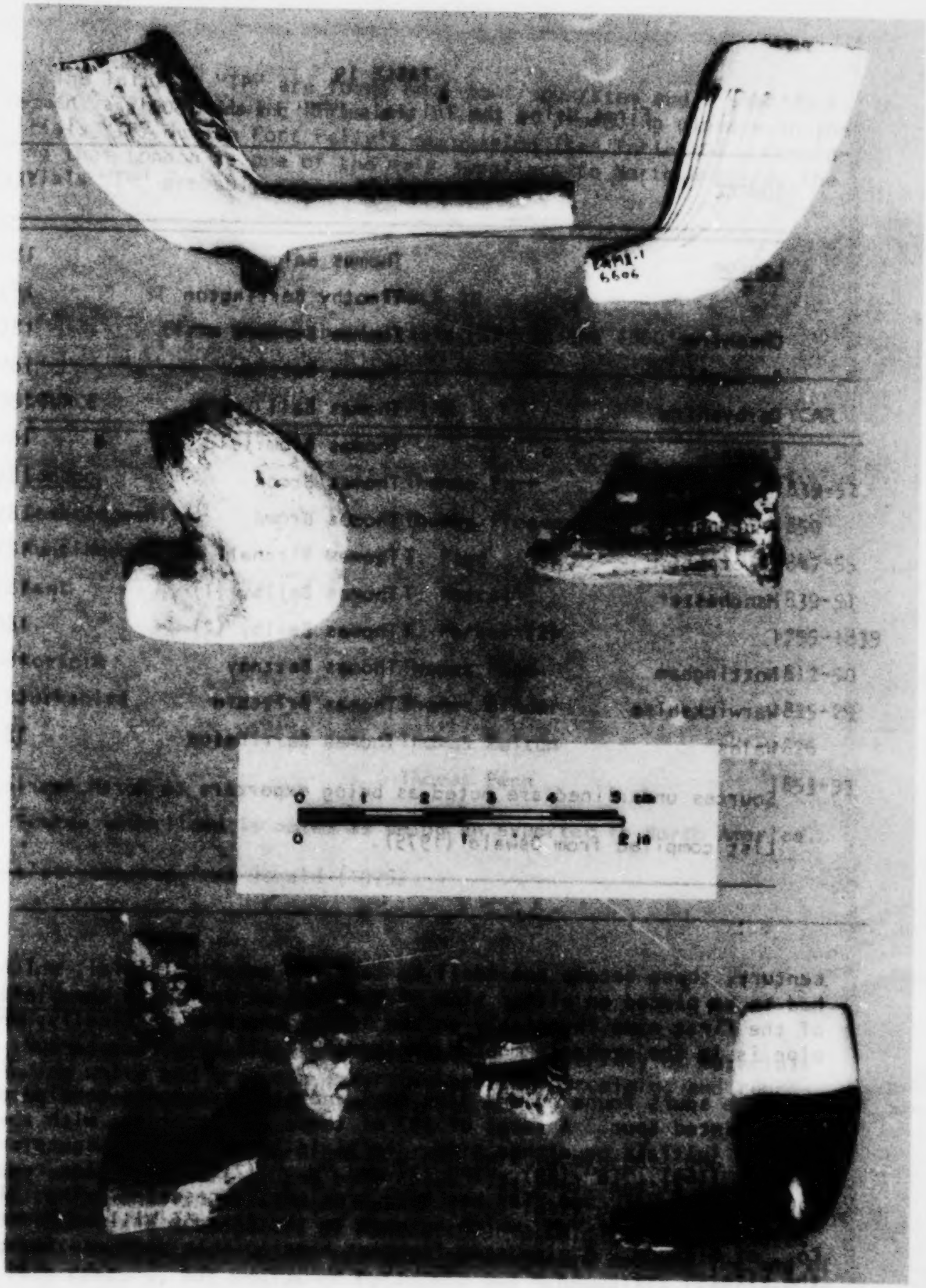


Figure 77. Decorated "TB" pipes, a; white clay stub-stemmed pipe, b; white clay stub-stemmed ribbed stem fragment, c; stub-stemmed pipe fragments with bosses, d; pipe bowl fragment with "squiggly" lines, e; porcelain stub-stemmed pipe, f.

TABLE 19

Firms Using the Initials "TB" in the 1800's

| SOURCE | FIRM | YEAR |
|---|---|---|
| London | Thomas Balme | 1805-45 |
| | Timothy Berrington | 1835 |
| Cheshire | Thomas Bernard | 1857-64 |
| Cornwall | Thomas Bastian | 1844 |
| Derbyshire | Thomas Ball | 1852 |
| Essex | Thomas Blomfield | 1848 |
| Hampshire | Thomas Brook | 1841 |
| Huntingdonshire | Thomas Brown | 1850-67 |
| Liverpool | Thomas Birchall | 1816-45 |
| Manchester | Thomas Beilby (1) | 1838-51 |
| | Thomas Beilby (2) | 1861 |
| Nottingham | Thomas Bettney | 1840-68 |
| Warwickshire | Thomas Brittain | 1839-50 |
| Wales | Thomas Berrington | 1839 |

Sources underlined are noted as being exporters to North America.

List compiled from Oswald (1975).

century, these became too small to take the maker's initial, which now had to be placed on either side of the heel or spur with the "initial of the first name invariably on the left, generally vertically, when the pipe is in the smoker's mouth" (Walker 1977:12).

The spurs found on the pipe bowl and stem fragments consist of a long-pointed spur. A total of 197 of these was recorded, with the maker's initials on either side. Initials found on these spurs consist of "IF" (164), "TB" (29), "TP" (2) and "W _" (2). Discussion regarding the initials "IF" and "TB" has been previously presented. The initial "W" may be part of "WM" which belongs to the firm of William Murray and Co., of Glasgow. A pipe stem fragment bearing this name was found at the site.

The initials "TP" are found on 1 bowl/spur/stem and 1 stem/spur fragment. The following firms are listed as producing pipes with the initials "TP" during Fort Pelly's occupation (see Table 20). Considering that London is one of the main suppliers to North America, the initials "TP" probably represent Thomas Parr.

TABLE 20

Firms Using the Initials "TP" in the 1800's

| SOURCE | FIRM | YEAR |
|---|---|---|
| London | Thomas Parr | 1839-52 |
| Cambridgeshire | Thomas Preever | 1850 |
| Huntingdonshire | T. Page | 1847-55 |
| Kent | T. Pascall | 1839-51 |
| | T. Parker (2) | 1795-1839 |
| Norfolk | Thomas Page | 1812-50 |
| Yorkshire | Thomas Pinder | 1825-29 |
| | Thomas Polton | 1826 |
| | Thomas Penn | 1853-93 |

Source underlined is noted as being an exporter to North America.

List compiled from Oswald (1975).

## Stub-Stemmed Pipes

Sub-stemmed pipe fragments were found in a variety of materials including white and gray clay, earthenware and porcelain, and representing various countries of manufacture.

Three white clay stub-stemmed pipes were recovered. One is complete, except for part of the bowl (Figs. 77, 78a), and is similar in style to the one illustrated in Walker (1977:1647) produced by the firm of Pollock's and McDougall's of Manchester. Oswald (1975:111) notes that these stub-stemmed pipes appeared to originate towards the end of the 18th century, but moulds of Pollock's and McDougall's firm were in use until their closure in this century. The second specimen consists of the stem/bowl juncture and precludes any observance of shape. The third stub-stemmed pipe fragment consists of the stem portion and differs

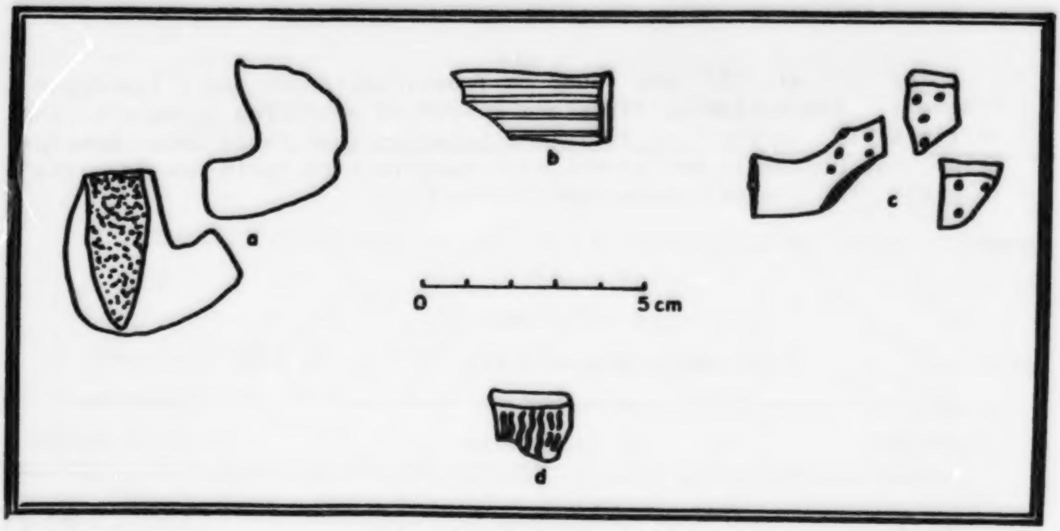


Figure 78. White Clay and Earthenware Stub-stemmed Pipes.

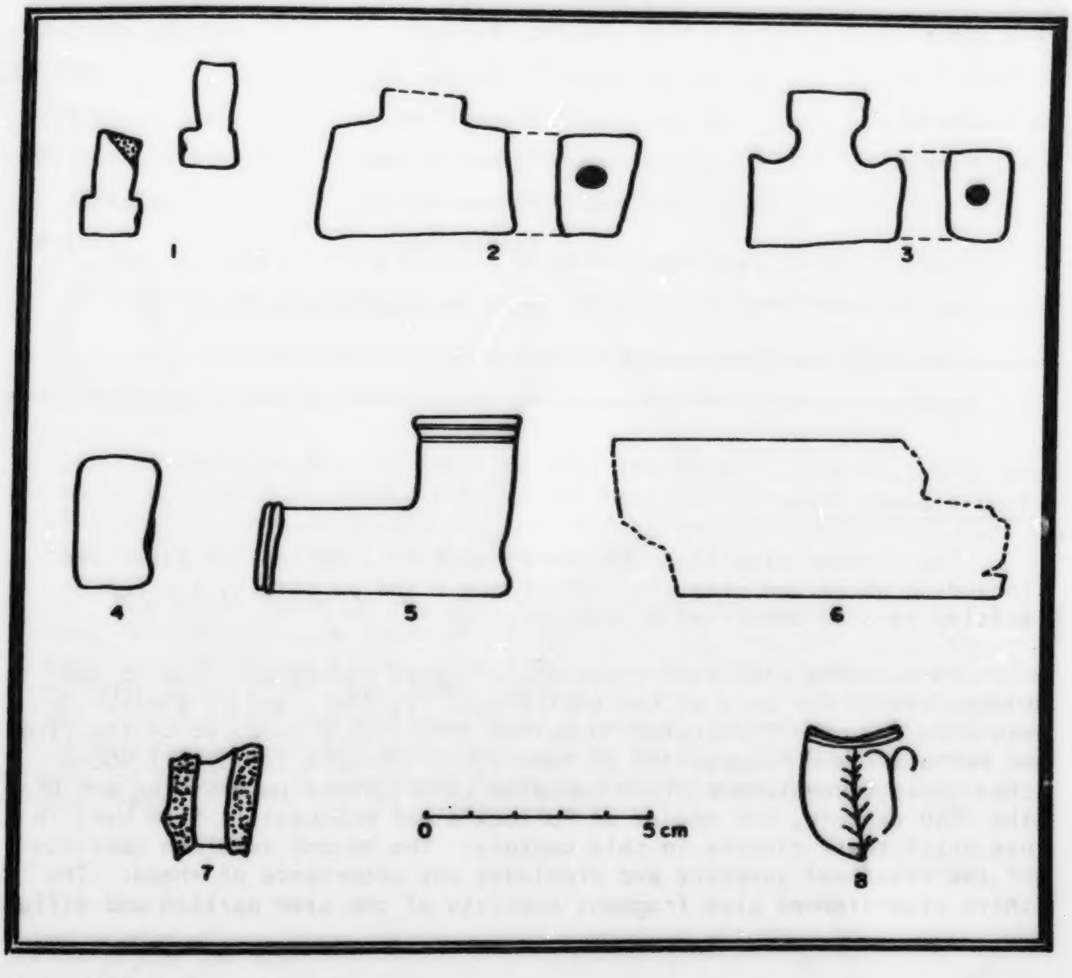

1
2
3
4
5
6
7
8
0
5 cm

Figure 79. Stone Pipe Bowl Shpaes.

in style and shape from the first example. The stem is longer, measuring more than 36 mm (broken length), and is decorated. This decoration consists of moulded lines which run along the length of the stem (Figs. 77, 78b). Walker (1975, 1977) has studied this form of pipe and states that stub-stemmed pipes are American made and only rarely occur on sites in Canada. Usually they are found in areas of close geographic proximity to the U.S., where interaction between the two is more common. It is possible that the first stub-stemmed pipe described is also of American origin. However, as there are no identifying maker's mark, this is difficult to discern.

Fragments of stub-stemmed pipes made of gray clay represented approximately four different pipes. Most of these are bowl fragments (6) which are too small to allow any conclusive identification of shape. One of the bowl fragments has an incised design in a cross-hatch pattern.

Three bowl fragments and one stem/bowl fragment, possibly representing the same pipe, are decorated with the use of bosses, which are restricted to the bowl (Figs. 77, 78c). It is made of salmon coloured clay and a brown slip has been applied. The pipe fragments are extremely burnt.

Two earthenware stub-stemmed pipe fragments would also be of American manufacture. One fragment consists of the stem and a rectangular spur. The exterior is dark brown with a glaze applied. The interior is brown/gray and no glaze has been applied. No initials or identifying marks are present. The second fragment consists of a bowl fragment from a decorated pipe. The exterior is rust coloured and glazed. Whether a glaze is present on the interior cannot be determined as spalling has occurred. Decoration on the bowl consists of short "squiggly" moulded lines, running along the length of the bowl (Figs. 77, 78d).

### Porcelain Stub-Stemmed Pipes

Twelve porcelain pipe fragments were recovered. The exteriors are dark brown and glazed and one has gold/white mottling at the mouthpiece end. The interiors are white and not glazed. Two bowl fragments are white and dark brown with a thin gold/brown mottled band separating the two colours (Fig. 78). These pipes, being made of porcelain, were non-absorbent and gave a hot, strong smoke (Walker 1967:67). Such hard paste porcelain pipes would have been made in Germany. The porcelain pipes were expensive during the early part of the 19th century, however, by 1860, they were being mass-produced by presses and probably much cheaper (Walker 1977:68).

### Stone Pipe Bowls and Fragments

A number of pipes and fragments were found which could be of Indian manufacture. It has also been suggested that they were made or acquired by the Europeans for trade to the Indians (Kidd 1970:153). Eight different shapes of stone pipes (Figs. 79, 80) are represented. One small pipe made of blue/gray steatite (Fig. 79.1) conforms to the general diagnostic features of pipes referred to as "Micmac". McGuire (1899:479-480) provides this description:

> It has a bowl, in shape not unlike an inverted acorn, which sits upon a keel-like base, broadest where it touches the bowl, and extending beyond the bowl at times an inch or more on each side. Through the top of this base or keel there is drilled a stem hole one-half its length until it intersects at right angles the base of the bowls...

Unfortunately, the name "Micmac" implies a cultural affiliation which is misleading as occurrences of this style of pipe have been reported from across the continent and as far north as the Northwest Territories and south to Georgia (Wallace _et_ _al_. 1963:167).

Two pipes (Fig. 79.2 & 3) are similar in shape. Both are rectangular with a small bowl extending from the centre of the main body. One pipe (Fig. 79.2) is made of a milky white-coloured pipestone and is simple in form, with no decoration. The second specimen (Fig. 79.3) is made of a sandy, brown coloured soapstone. The ends of the rectangular body have been curved upwards and pointed and the bowl has the presence of a rim.

Another pipe consists of a roughly fashioned rectangular piece of gold coloured soapstone, with a hole for the stem (Fig. 79.4). It is extremely crude in appearance compared to the preceding pipes. One complete pipe made of dark brown soapstone differs from the preceding stone pipes in that it consists of a bowl and stem. The bowl is at right angles to the stem and two grooved lines appear at the top of the bowl and around the end of the stem (Fig. 79.5). Two bowl fragments, both of gray pipestone may have belonged to pipes of a similar style.

One pipe stem fragment (Fig. 79.6) of a light gray pipestone measures 8.5 cm in length and 3.6 cm in width. This suggests a pipe of much larger proportions and shape than those previously described. Three bowl fragments of red catlinite, belonging most likely to the same pipe, were also found. Unfortunately, these are too small to provide any information on the shape or style of the pipe. One bowl fragment made of grey pipestone (Fig. 79.8) suggests a style similar to the white clay pipes. This pipe is more elaborate in terms of decoration, but the basic shape is that of the white clay pipe. The designs on the bowl include: a vertical line of v's moulded along a line; panelling around the bowl; and the presence of two rings around the top of the bowl. Also, one pipe stem fragment with a heel, made of gray pipestone (Fig. 80), was also found, suggesting the fashioning of the pipe at the post after the style of the white clay pipes.

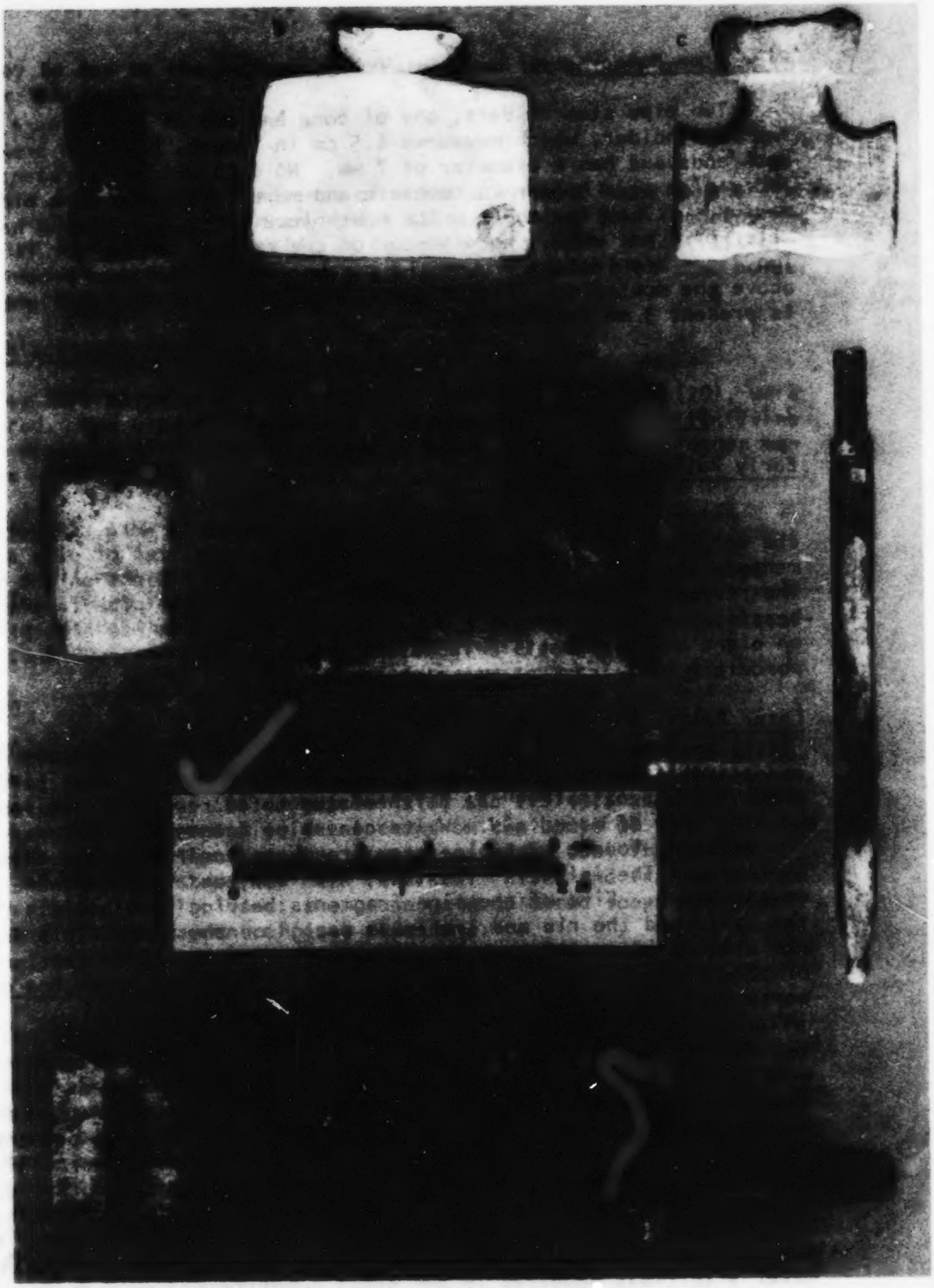


Figure 80. Pipestone bowls and stem fragment, a - h; pipe stem holder, i.

### Pipe Stem Holders

Two pipe stem holders, one of bone and one of ivory, were found. The bone holder, which measures 6.5 cm in length, has been broken at both ends and has a diameter of 7 mm. No decoration is present. The ivory pipe stem holder is complete and more elaborate. The pipe stem measures 9.7 cm in length. The mouthpiece is 14 mm long and has a diameter of 4 mm, while the diameter of the rest of the holder is 6 mm. Two lines are incised around the mouthpiece and the stem proper just above the mouthpiece (Fig. 80). At the insertion end, a slight groove is present 3 mm from the end.

## 2.1.2 Distribution of Pipes

### Early Palisade

Relatively few (85) white clay pipe fragments were recovered in the early palisade. Over half of the total consisted of pipe stem fragments. The initials "IF" (3) and "TB" (2) were present on the spurs. The rib and leaf/vine design was present on the two pipe fragments bearing the initials "TB" on the spur. This design was also present on eight bowl fragments. Two stem fragments had been reworked. One porcelain bowl fragment was also found.

### Later Palisade

Pipe fragments (706) found in the east, north and west palisades comprised approximately one fifth of the total recovered and represented a variety of materials. White clay pipe fragments (700) represented the majority found, with pipe stem fragments comprising over half of the total. The initials "IF" (14), "TB" (9), and "TP" (1) were present on the spurs. Five of the pipe fragments bearing the initials "TB" on the spurs had the rib and leaf/vine design on the bowl. This design was also found on 106 bowl fragments. The largest concentration (58) of this design occurred in Sq. 40R03, in the western extension of the north palisade.

One Ford-Stepney maker's mark was found on a bowl fragment in the west palisade and the "IF" pipe with the decorated bowl was found in the east palisade. Five pipe stem fragments had been reworked and two pipe stem fragments (found in the north palisade) had the presence of a red stain. Pipes made of other materials included: a porcelain pipe bowl fragment; a gray pipestone stem/spur fragment; the dark brown soapstone bowl/stem fragment; and three catlinite bowl fragments. The various pipe portions were distributed fairly evenly throughout the trenches (north - 272, east - 174, west - 260). No one portion or maker's initials appeared in any great quantity in one area, except in Sq. 40R03, where a large concentration (143) of pipe fragments was encountered. No pipe fragments were retrieved from the south palisade.

This may be due to the excavation strategy and techniques employed to uncover the remains.

## Stable

Very few (17) pipe fragments of white clay were found in the stable. No one portion was found in any great quantity. One bowl fragment was decorated in the rib and leaf/vine design and no maker's initials or pipes made of other materials were present. The bone pipe stem holder was also recovered from this structure.

## Early Blacksmith Shop

Few (27) white clay pipe fragments, mainly pipe stems (20), were recovered. One pipe stem had been reworked and the rib and leaf/vine design appeared on one bowl fragment. No pipe fragments of other materials were present.

## Men's House

A small number (93) of white clay pipe fragments, mainly pipe stems (62), were recovered from the men's house. The initials "IF" were present on the spurs of seven. No other maker's initials, decoration or pipe fragments of other materials were found.

## Kitchen

A substantial amount (556) of pipe fragments, mainly stem (323) and bowl (115) fragments of white clay was retrieved from the kitchen. The initials found on the spurs consisted of "IF" (37) and "TB" (3). The rib and leaf/vine design was present on the bowls of the "TB" pipe fragments. This design was also present on eight bowl fragments. Eleven of the pipe stems had been reworked. Pipes and fragments made of other materials included: the crude gold coloured soapstone pipe bowl; and a bowl fragment of gray pipestone.

## Factor's House

The largest quantity (843 or 21%) of pipe fragments was found in the factor's house. The majority consisted mainly of stems (464) and bowl (228) fragments of white clay. The initials "IF" (39) and "TB" (5) were present on the spurs. The rib and leaf/vine design was present on the bowls with the initials "TB" on the spurs. This design was also found on twenty-two bowl fragments. The effigy pipe bowl was recovered in this feature. Twenty-two stems showed evidence of reworking. Pipes made of other materials included: a porcelain bowl and a mouthpiece fragment; the blue/gray steatite pipe bowl; the gray pipestone bowl fragment; the earthenware stem/spur fragment; and three gray clay stub-stemmed bowl fragments.

## Store

A large number (725) of pipe fragments were found in this feature, mainly in the cellar area (678). The majority of these were pipe stem (294) and bowl fragments (327) of white clay. The initials "IF" were present on thirty-seven spurs. Also, the Ford-Stepney maker's mark was present on one bowl fragment. The initials "TB" were not present, however, the rib and leaf/vine design found to be associated with pipes bearing these initials was present on four bowls. Seven of the pipe stems had been reworked. Pipes made of other materials included: a porcelain bowl/stem fragment; and the bowl fragments and stem/bowl fragment of the gray clay pipe decorated with bosses. The ivory pipestem holder was also recovered from the cellar in this feature.

## Warehouse

A substantial amount (617) of pipe fragments in a number of different materials was retrieved from various areas of the warehouse. The majority consisted mainly of stem (358) and bowl (179) fragments of white clay. The initials present on the spurs consisted of "IF" (12), "TB" (4), and "TP" (1). The rib and leaf/vine design was found on the bowls of the "TB" pipes. This design was also present on thirty-five bowl fragments. Eight pipe stems had been reworked and three pipe stems (one in the west foundation and two in the north cellar) had the presence of a red stain. Pipes made of other materials included: a porcelain bowl fragment; four stub-stemmed gray clay bowl fragments, one decorated with bosses; one earthenware bowl fragment decorated with "squiggly" lines; and the large light gray pipestone stem. Distribution of the pipe fragments in the warehouse consisted of the various pipe fragments scattered throughout the foundation, hearth and cellar areas, with the largest concentration (35%) in the north cellar.

## North Cellar

This cellar yielded a small number (22) of pipe fragments in a variety of materials. The majority (18) consisted of various white clay pipe fragments. The initials "IF" (4) and "TB" (1) were found on the spurs. The rib and leaf/vine design was present on the bowl with the initials "TB" on the spur. This design was also found on four bowl fragments. Two pipe stem fragments had been reworked. Pipes made of other materials included: two porcelain bowl/stem fragments and one bowl fragment; and the sandy brown soapstone pipe bowl.

## Miscellaneous Features

Small numbers of pipe fragments were found in the ash areas west of the men's house and the later blacksmith shop. These consisted of white clay stem and bowl fragments. Nine white clay pipe fragments and the milky white pipestone pipe bowl were found in the fur press area. The initials "IF" (2) and "TB" (1) were present on the spurs of the white clay pipes. The rib and leaf/vine design was found on one bowl fragment.

### 2.1.3 Jewelry

A number of items of jewelry, mainly finger rings, were recovered. Other jewelry found included, earrings, a necklace and beads from a necklace, and pendant or earring.

#### Finger Rings

A total of 28 finger rings, consisting of bands (Fig. 81) made of yellow metal (26), white metal (1) and ferrous metal (1), were found. The bands are all undecorated except for one, which has a triangular design with intervening dots incised. The width of the bands range from 15 mm to 55 mm, and the diameter of the rings range from 1.8 cm to 2.4 cm in size.

#### Earrings

One pair of earrings for pierced ears was recovered. One earring is complete and consists of a wound ultramarine glass bead placed in a brass setting (Fig. 81). A thin loop of brass extends from the top and represents the portion that would be inserted through the ear. A thicker loop of brass extends from the bottom and would be used for fastening with the upper loop once the earring was inserted. The entire earring measures 17 mm in length. Only the glass and brass setting of the second earring was found.

#### Necklace

A necklace (Fig. 81) made of 67 shadow blue wound beads of graduated sizes was found. The smaller beads (6 mm) are present at the ends with the largest bead (14 mm) in the centre. The yellow metal attachment of the necklace is present only on one end.

#### Necklace/Pendant

Two beads belonging to pendants or a necklace were found. The first is a rose wine coloured wound glass bead, tear drop in shape, measuring 21 mm in length. There is no string hole present, nor any attachment for a chain. The second is colourless with moulded ridges running the length of the bead, which is 24 mm. The interior is hollow with an orange/red coloured substance inside. The bead is tear drop shaped with the diameter at the bottom being 17 mm. A third cinnamon coloured wound glass bead is semi-circular in shape with a ridge around the circumference. Its appearance suggests that it would have been placed in a setting either for a ring or earring or possibly a pendant. The beads employed for the various pieces of jewelry are representative of those produced in the 19th century.

#### Ornamental Badge or Pin

One ornamented badge or pin made of yellow metal consists of a

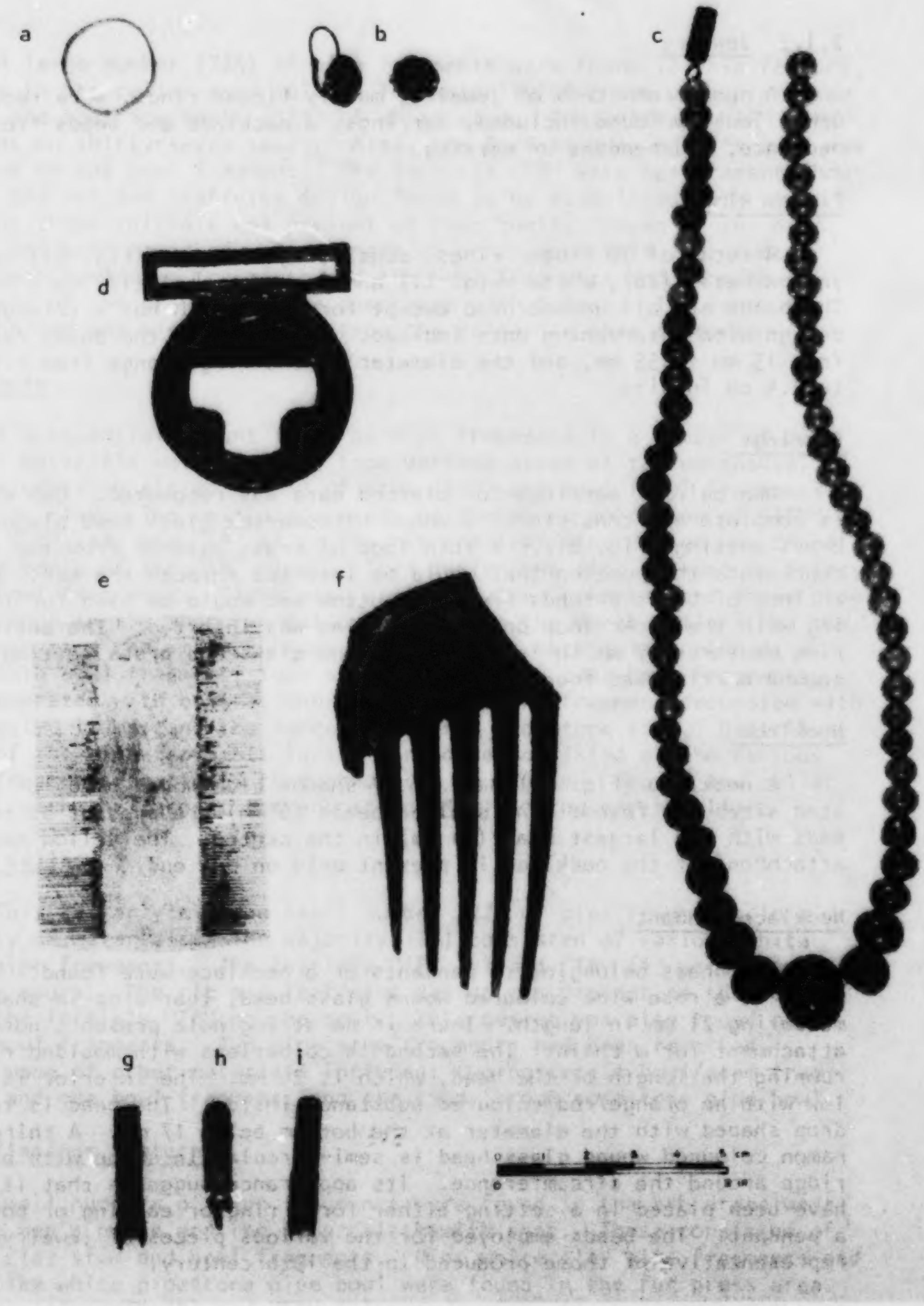


Figure 81. Yellow metal finger ring, a; earrings, b; necklace, c; ornamental badge or pin, d; hair comb, e; hair pin, f; pen nibs, g - i.

rectangular top with a slot attached to a circular segment which has an embossed leaf design around the edge (Fig. 81).

### Heart

One very crudely-fashioned heart of ferrous metal probably represents a child's trinket.

### Pocket Watches

Two outer cases and one interior plate belonging to pocket watches were found. One case is quite simple. It is circular in shape, 3 cm in diameter, and made of a gray metal. The second case is more elaborate. It also is circular in shape, 5 cm in diameter, with an ornamented stem-like extension consisting of a flange and knob made of yellow metal. Inside, three stamped marks are present. The first consists of the letters "J.W." enclosed in a rectangle. The second is an anchor enclosed in a rectangle with a circular top, and the third mark is not discernable. The interior plate is circular, 4.2 cm in diameter, and made of yellow metal. A number of small circular openings and one rectangular opening are present. "D. Edmonds" is incised along the top
London
of the plate, and the numbers "2002" are incised on the bottom.

### Money

One English penny with Queen Victoria's picture and the date 1841 was found.

## 2.1.4 Distribution of Jewelry, Pocket Watches and Money

The jewelry, pocket watch parts and money were mainly restricted to three structures, the warehouse, the kitchen and the store. The necklace of blue beads was found in the north cellar of the warehouse along with four yellow metal finger rings. The ornamental badge or pin and the pocket watch pieces were also recovered from this north warehouse cellar. Five additional yellow metal finger rings were found distributed throughout the warehouse. The rose wine coloured tear drop shaped pendant bead was found in the store cellar, along with two yellow metal finger rings, the crudely fashioned heart and the English penny. The remaining jewelry beads, the earrings and two yellow metal finger rings were found in the kitchen. The remaining jewelry items, the finger rings, were found in the following structures: factor's house (4), early blacksmith shop (3), the later west and north palisades (7) and the early east palisade (1).

### 2.1.5 Hair Combs and Pin

Nine hair combs, three complete and six fragments, made of bone as well as two fragments of black plastic combs were found. The bone combs are all of the same style, consisting of a solid central panel with teeth on each side (12 teeth/cm) and rectangular in shape (Fig. 81). The three complete combs measure 8 cm by 5 cm, 7.2 cm by 4.5 cm and 7.5 cm by 5 cm. The bone hair pin (Fig. 81), which would have been used to fasten the hair, is oval with teeth cut in one end. Five teeth were present and were quite wide, measuring approximately 6 mm each, the longest tooth being 6.7 cm. The overall length of the hair pin cannot be determined, as the ends of the teeth were missing, but it probably measured about 8 to 9 cm. The two black plastic comb fragments represent the common type found in any modern store.

### 2.1.6 Distribution of Hair Combs

The bone combs were fairly equally distributed between the following structures: warehouse (3); kitchen (2); North cellar (1); factor's house (2) and the store (1). The hair pin was found in the North cellar along with one of the complete bone combs. The black plastic comb fragments were found in rodent disturbances in the factor's residence and the kitchen.

### 2.1.7 Writing Equipment

#### Pen Nibs

A total of seven pen nibs, made of a gray metal were found. Three styles are present: (1) one which encloses only part of the wooden holder and continues straight into the nib; (2) one which is similar to the first but has notches where the nib begins; and (3) one which completely encloses the wooden holder and continues straight into the nib (Fig. 81).

#### Slate Pencils and Boards

A total of 10 slate pencil fragments are either circular, square or hexagonal in shape. The diameters for the various shapes are: circular, 4.3 mm to 5.5 mm; square, 2 mm; and hexagonal 4.3 mm to 4.4 mm. Thirty-eight various sized fragments of slate board were recovered. Scratches are evident on three fragments and one hole is present on one piece.

#### Map Case

This consists of a number of pieces of hollow tube, 4.5 cm in diameter and made of ferrous metal. One end piece had a sealed bottom.

### 2.1.8 Distribution of Writing Equipment and Map Case

The largest number of writing equipment items were found in the following features: warehouse, four slate board fragments, three slate pencil fragments and one pen nib; store, one slate board fragment, two slate pencil fragments and two pen nibs; and the factor's house, one slate board fragment and two slate pencil fragments. The remaining items were scattered throughout the post in the men's house, the kitchen and the palisades. The map case was found in the kitchen.

## 2.2 Clothing

### 2.2.1 Buttons

A total of 645 buttons and fragments was made from various materials: yellow metal (235), white metal (6), gray metal (16), ferrous metal (49), yellow and ferrous metal (8), ferrous metal and fabric (6), yellow metal and glass (1), bone (149), shell (135), wood (18), and white glass (22). Decoration is present on 98 specimens and includes: etched or painted designs; gilt; and gilt and trade or brand names on the front or back. Classifications according to Olsen (1963) and South (1964) are attempted where possible. Table 21 lists the breakdown of materials and types of fastening according to shape and size. Sizes are presented in ranges: 0-5, 6-10, 11-15, 16-20, 21-25, 26-30 mm. Table 22 lists the types of decoration for the various materials.

Functional categories for the metal and non-metal buttons are broad and general and, therefore, not widely employed. The non-metal buttons such as wood, bone, white glass and shell were produced in great quantities during the 18th and 19th centuries to fasten shirts, underwear and men's trousers. Metal buttons were also produced in great quantities during this time to fasten coats, vests and suspenders. The buttons, especially the non-metal ones, are of little diagnostic value as large quantities were produced during the 18th and 19th centuries. Metal buttons with quality marks or animal designs, however, are attributable to the mid to late 19th century, and, therefore, can be useful for general dating.

#### Bone

The bone buttons found are mainly of the 4-hole or 3-hole variety. They are similar to South's types 19 and 20 (1800-1865) and Olsen's type J (1750-1830). Two buttons with one hole were also recovered.

TABLE 21

Morphological and Quantitative Data on Buttons Regarding Material, Fastening and Size

| | | Type of Fastening | | | | | | | | | Diameter/Size (mm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Shape | Material | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 |
| Round | Yellow | 1 | | | | | | | | | | | | 1 | | |
| | Metal | | 1 | | | | | | | | | | | 1 | | |
| | | | | | 5 | | | | | | | | 2 | 3 | | |
| | | | | | | | 155 | | | | | | 6 | 75 | 73 | 1 |
| | | | | | | | | 1 | | | | | 1 | | | |
| | | | | | | | | | 22 | | | | 3 | 19 | | |
| | | | | | | | | | | 1 | | | 1 | | | |
| Dome | Yellow | | | | | | | | | | | | | | | |
| | Metal | | | | | | 32 | | | | | 1 | 30 | 1 | | |
| Round | White | | | | | | | | | | | | | | | |
| | Metal | | | | | | 3 | | | | | | | 1 | 2 | |
| | | | | | | | | | 2 | | | | | 2 | | |
| Round | Gray | | | | | | | | | | | | | | | |
| | Metal | | | | 1 | | | | | | | | | 1 | | |
| | | | | | | | 4 | | | | | | | 4 | | |
| | | | | | | | 3 | | | | | | | | | 3 |
| | | | | | | | | | 5 | | | | | 5 | | |
| Round | Ferrous | | | | | | | | | | | | | | | |
| | Metal | | | | 5 | | | | | | | | | 5 | | |
| | | | | | | | 15 | | | | | | 1 | 12 | 2 | |
| | | | | | | | | | | 17 | | | 5 | 12 | | |
| Dome | Ferrous | | | | | | | | | | | | | | | |
| | Metal | | | | | | 1 | | | | | 1 | | | | |
| Round | Bone | 2 | | | | | | | | | | 1 | 1 | | | |
| | | | | 5 | | | | | | | | | 5 | | | |
| | | | | | 140 | | | | | | | | 57 | 83 | | |
| Round | Shell | | 3 | | | | | | | | | 2 | | | | 1 |
| | | | | 5 | | | | | | | | 4 | 1 | | | |
| | | | | | 126 | | | | | | | 98 | 26 | 1 | | 1 |
| Round | Wood | 15 | | | | | | | | | | | 8 | 6 | 1 | |
| | | | | | 3 | | | | | | | | 1 | 2 | | |
| Round | White | | | | | | | | | | | | | | | |
| | Glass | | 1 | | | | | | | | | | 1 | | | |
| | | | | | 21 | | | | | | | 3 | 15 | 3 | | |
| Round | Glass with yellow metal shank | | | | | | 1 | | | | | | 1 | | | |
| Round | Front-yellow metal | | | | | | 2 | | | | | | | 2 | | |
| | Back-Ferrous metal | | | | | | 2 | | | | | | 2 | | | |
| | | | | | | | 2 | | | | | | | 2 | | |
| Dome | Front-yellow metal | | | | | | 1 | | | | | | 1 | | | |
| | Back-Ferrous metal | | | | | | | | | | | | | | | |

Fastenings: 1 = one-hold; 2 = two-hole; 3 = three-hole; 4 - four-hole; 5 = five-hole; 6 = eye/shank; 7 = stud; 8 = birdcage 4-hole; 9 = birdcage 2-hole.

## TABLE 22

Type of Decoration on Buttons

| Decoration Front | Decoration Back | Yellow Metal | White Metal | Gray Metal | Ferrous Metal | Bone | Shell | Wood | White Glass | Glass & Yellow Metal | Yellow Metal & Ferrous | Ferrous & Fabric |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plain | Plain | 140 | 4 | 4 | 31 | 151 | 113 | 18 | 19 | 1 | 5 | 5 |
| Plain | QM | 24 |  |  | 1 |  |  |  |  |  |  |  |
| Inlay | Plain | 1 |  |  |  |  |  |  |  |  |  |  |
| Gilt | Plain | 1 |  |  | 2 |  |  |  |  |  | 1 |  |
| Incised | Plain | 171 | 2 | 4 |  |  | 20 |  |  |  |  |  |
| Incised | QM | 7 |  |  |  |  |  |  |  |  |  |  |
| QM | Plain | 1 |  |  |  |  |  |  |  |  |  |  |
| QM | QM | 1 |  |  |  |  |  |  |  |  |  |  |
| Impressed | QM | 1 |  |  |  |  |  |  |  |  |  |  |
| Impressed | Plain |  |  | 1 |  |  | 1 |  | 2 |  |  |  |
| Painted | Plain |  |  |  |  |  |  |  | 1 |  |  |  |
| Painted | Painted |  |  |  |  |  |  |  | 2 |  | 1 |  |
| Stamped | Plain |  |  | 1 |  |  |  |  |  |  |  |  |

QM = Quality Mark

## Shell

Shell buttons at Fort Pelly 1 were found in a variety of sizes and designs. These are illustrated in Fig. 82 along with the quantities recovered. The 4-hole buttons with a depressed central area for the holes are the same as South's type 22 (1800-1865).

## Wood

The wooden buttons are very regular and plain. The majority have one hole while the remaining few have four holes.

## White Glass

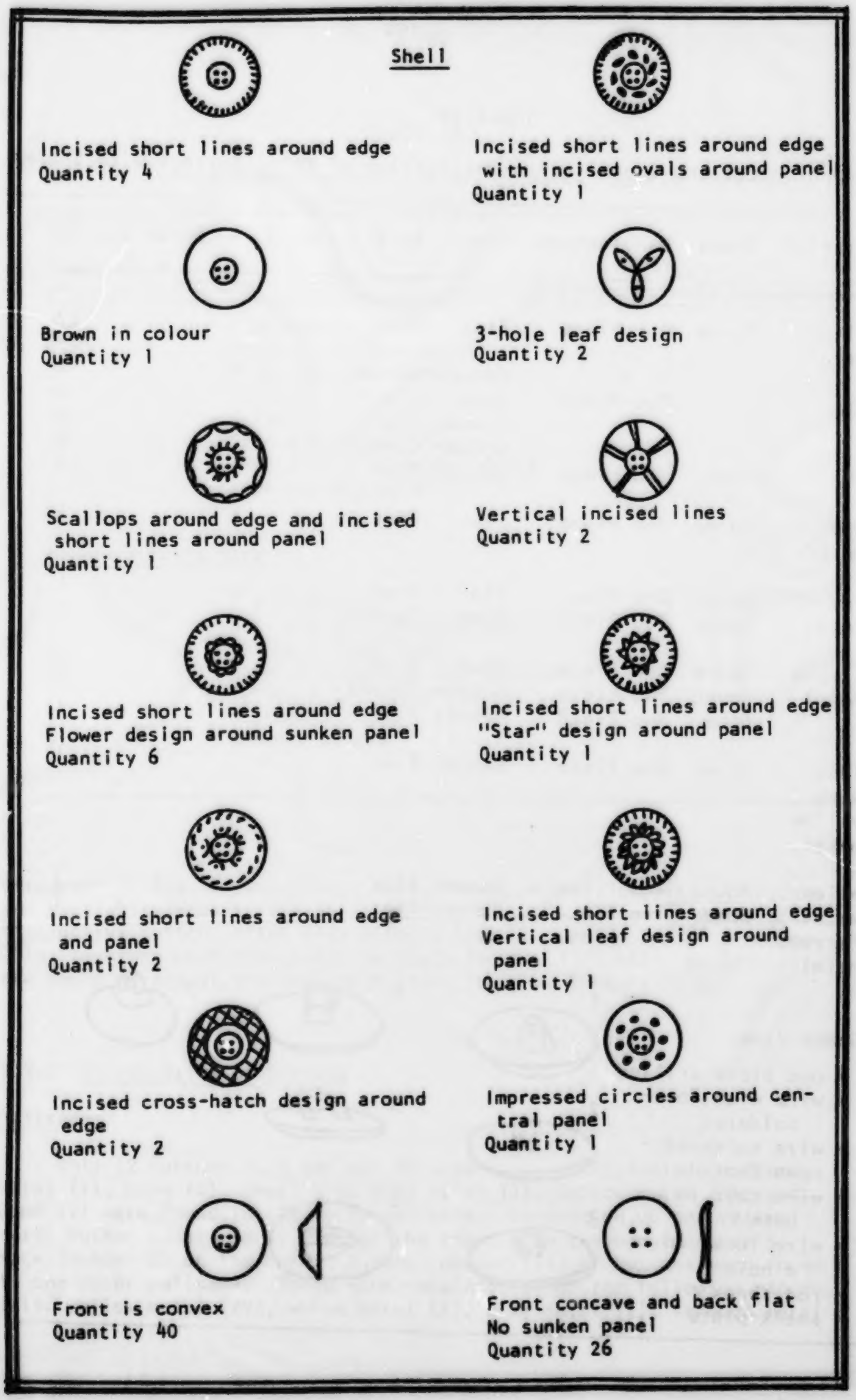
The name refers to glass buttons which are creamy-white in colour. These are most commonly found on under clothing. These buttons have either three or four holes set in a sunken panel. Decoration is present on a number of specimens and consists of: moulded "bumps" around the edges (1); black "polka-dots" painted on one side (1); and incised diagonal lines along the edge (1). Two white glass buttons are completely painted, one turquoise and the other teal green.

## Metal Buttons

The majority (314 or 60%) of the buttons found are made of metal in a number of shapes and sizes with various fastenings and profiles. The main type of fastening consists of an eye or shank, which is attached by a number of techniques. Table 23 lists the shape, manufacture, profile and shank type for various complete metal buttons.

Decoration, quality marks, manufacturer's marks or a combination of these are present on a number of different metal buttons. Quality marks such as "Treble Plated", "Rich Orange Colour" represent "Commendatory words or phrases on buttons or backs" (Brown 1968:266). These marks were first employed around the 1820s on gilt buttons in order to attract the attention of potential customers (Houart 1977:52). The quality marks found at Fort Pelly 1 along with their quantities are listed in Table 24. Other indications present on the buttons found include manufacturer's names or initials. These are also presented in Table 24. Decoration is present on three types of metal buttons, one piece and two piece buttons with shanks and one piece buttons referred to as "birdcage". The decorations or designs present on these various buttons are illustrated in Fig. 83.

Three buttons bearing animal designs are of special interest. According to Houart (1977:10), animal designs were first employed on hunting buttons produced in the 18th century in France and England, but most buttons decorated in this manner date from "the second half of the nineteenth century when the stamped picture buttons became fashionable". These stamped hunting buttons of the 19th century were used world-wide and the most commonly represented figures were dogs of



Shell

Incised short lines around edge
Quantity 4

Incised short lines around edge with incised ovals around panel
Quantity 1

Brown in colour
Quantity 1

3-hole leaf design
Quantity 2

Scallops around edge and incised short lines around panel
Quantity 1

Vertical incised lines
Quantity 2

Incised short lines around edge
Flower design around sunken panel
Quantity 6

Incised short lines around edge
"Star" design around panel
Quantity 1

Incised short lines around edge and panel
Quantity 2

Incised short lines around edge
Vertical leaf design around panel
Quantity 1

Incised cross-hatch design around edge
Quantity 2

Impressed circles around central panel
Quantity 1

Front is convex
Quantity 40

Front concave and back flat
No sunken panel
Quantity 26

**Figure 82. Various Designs on Shell Buttons.**

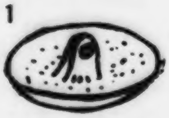
## TABLE 23

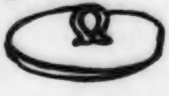
Morphological and Quantitative Description of Metal Buttons with Shanks

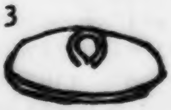
| Material | Shape | Manufacture | Profile Front | Profile Back | *Shank Type 1 | 2 | 3 | 4 | 5 | 6 | 7 | No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yellow metal | Round | One Piece | Flat | Flat | | | x | | | | | 27 |
| | | | | | | | | x | | | | 109 |
| | | | Convex | Convex | | | | x | | | | 1 |
| | | Two Piece | Flat | Flat | | | | | | x | | 2 |
| | | | Convex | Flat | | | x | | | | | 1 |
| | | | Convex | Convex | | | | | | x | | 6 |
| | Dome | Two Piece | Convex | Flat | | | | | | | x | 28 |
| White metal | Round | One Piece | Flat | Flat | | | | x | | | | 2 |
| Gray metal | Round | One Piece | Flat | Flat | | | | x | | | | 4 |
| | Round | Two Piece | Flat | Convex | | | | | | x | | 1 |
| Ferrous metal | Round | One Piece | Flat | Flat | | | | x | | | | 3 |
| | Round | Two Piece | Convex | Convex | | | | | | x | | 6 |
| | Dome | Two Piece | Convex | Flat | | | | | | | x | 1 |
| Glass with yellow metal | Round | One Piece | Convex | Flat | | | x | | | | | 1 |
| Yellow metal & Ferrous metal | Round | Two Piece | Convex | Flat | | | | | | x | | 3 |
| | Dome | Two Piece | Convex | Flat | | | | | | | x | 1 |

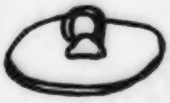
*Shank Type:

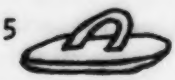
1 = one piece drilled
2 = wire with foot-soldered
3 = wire soldered - no foot
4 = wire cast in a boss
5 = wire loose in a hole
6 = rod shank
7 = shank-plate

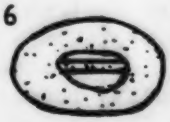
1


2


3


4


5


6


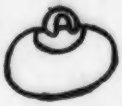
7


TABLE 24

Quality Marks and Manufacturer's Names or Marks Found on Fort Pelly 1 Buttons

| Quality Marks<br>Designation | Mark | Quantity |
|---|---|---|
| 1. | Orange Gilt Colour | 3 |
| 2. | Treble Gilt Orange | 2 |
| 3. | Rich Imperial Colour | 16 |
| 4. | Extra Plated | 1 |
| 5. | Extra Fine Gilt | 1 |
| 6. | Standard Orange Gilt | 1 |
| 7. | TREBLE GILT STANDARD COLOUR | 3 |
| 8. | Imperial Standard | 1 |
| Manufacturer's Mark | | |
| 1. | F & B London | 3 |
| 2. | G.B. & R.A."S MANUFACTURE | 7 |
| 3. | FAVELL & BOUSFIELDS | 1 |
| 4. | Brown & Tregilgas (on the front)<br>Turner & Co Patent (on the back) | 2 |
| 5. | Pittman's | 1 |
| 6. | Green's Patent | 1 |

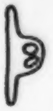
different breeds, horses, deer, boar, foxes, wolves, eagles, partridges and pheasants (Houart 1977:64). Hunting clubs in England had their own distinctive button, often with a fox's head, a running fox or a riding whip, together with the club's initials (Houart 1977:66). No initials are found on any of the hunting buttons found at Fort Pelly 1.

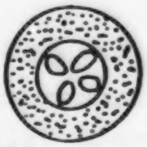
### 2.2.2 Distribution of Buttons

#### Palisades

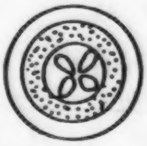
Only 12 buttons in a variety of materials, which included: ferrous metal (1), bone (2), shell (1), gray metal (1), yellow metal (4), and wood (2) were found in the early palisade. Decoration on one yellow metal button consisted of gilt on the front with the manufacturer's mark (number 2) on the back. A large number (71) of buttons were found in the later palisade. These were manufactured of the following materials: yellow metal (29), white metal (1), gray metal (1), ferrous metal

**Bird Cage**

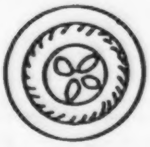




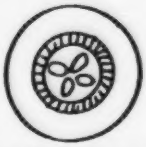
Fine pitting around edge.
Quantity: 1.



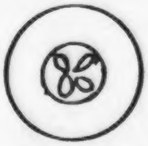
Fine pitting around panel.
Quantity: 1.



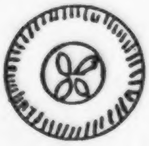
Incising in centre.
Quantity: 4.



Incising around sunken panel.
Quantity: 13.

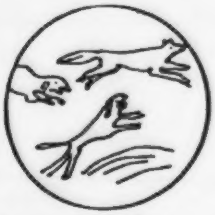


Painted black.
Quantity: 2.

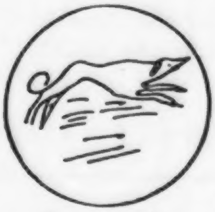


Incising around edge.
Quantity: 1.

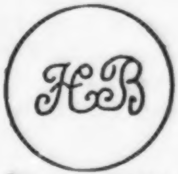
**One Piece**



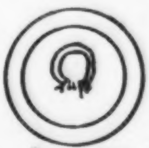
Dogs and fox.
Quantity: 1.



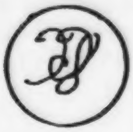
Dog design.
Quantity: 1.



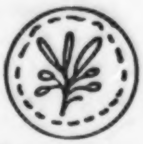
On reverse:
"TREBLE GILT
STANDARD COLOUR"
Quantity: 1



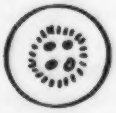
Reverse has raised edge.
Quantity: 3.



Quantity: 1.

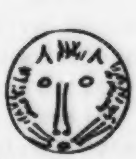


Quantity: 2

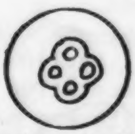


Incising around holes.
Quantity: 1.

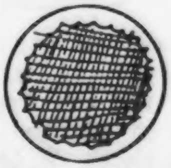
**Two Piece**



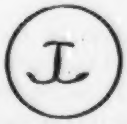
Fox face.
Quantity: 1.



Gilt cover over ferrous button.
Quantity: 2.



Crimped with cloth on front.
Quantity: 3.



Anchor design.
Quantity: 1.

Figure 83. Various Designs on Metal Buttons.

(10), bone (8), shell (9), white glass (3), yellow and ferrous metal (1), ferrous metal and fabric (2). Quality marks were present on three buttons and consisted of numbers 2, 3, and 6. The manufacturer's marks (numbers 1 and 2) were present on three buttons. Two birdcage buttons with design number 4, incising around the panel, and the white glass button with the black "polka dots", were recovered in the later palisade. Three yellow metal dome shaped buttons were also recovered there.

## Stable

One decorated shell button was found in the stable.

## Early Blacksmith Shop

A total of 17 buttons, 5 yellow metal, 4 bone and 4 shell was recovered. None of these were decorated. One yellow metal button was dome shaped.

## Men's House

Very few (8) buttons were found in this structure. These were manufactured of yellow metal (5), ferrous metal (1), gray metal (1) and wood (1). Manufacturer's mark number 4 was found on one button. The one piece metal button with design number 4 was found in this feature.

## Store

The quantity of buttons recovered in this structure (102) was slightly less than in the kitchen (107). Of the 102 buttons, 95 were found in the cellar and included the following materials: yellow metal (28), white metal (1), ferrous metal (8), bone (16), shell (17), white glass (4), gray metal (5), yellow and ferrous metal (2), ferrous metal and fabric (1). Thirteen yellow metal dome shaped buttons were also found. Quality mark number 4 was found on one button and the manufacturer's mark numbers 2 and 6 were found on two buttons. Five birdcage buttons in design numbers 1, 2, 3, 4, and 6 were found. The two piece metal buttons with design numbers 1, fox face, 2 and 3 were recovered in this structure. The remaining number of buttons were found in the hearth/chimney area (6) and the foundation (1).

## Warehouse

The largest number (190 or 30%) and variety of buttons were scattered throughout the warehouse, with the largest concentration (92) occurring in the north cellar. Button materials in the north cellar included: yellow metal (29), ferrous metal (5), bone (24), shell (20), wood (2), white glass (3), yellow metal and ferrous metal (1). Nine yellow metal dome shaped buttons were also present. Also one quality mark, number 3, the decorated two piece metal button design number 4, and one birdcage button with design number 4 were found in the cellar.

The remaining buttons were found in the east (25) and west (58) foundations, hearth/fireplace (12), south cellar (3). These were manufactured of a variety of materials as outlined for the north cellar. Quality marks found included numbers 1, 3, 4, 7, and 8. Two manufacturer's marks were found, numbers 1 and 2. Decoration on the metal buttons included design numbers 5 and 6 on the one-piece buttons, and the design numbers 1, 3, and 4 on seven birdcage buttons. Also, three white glass buttons which included the following decorations: incising around the edge; moulded "bumps" around the edge; and turquoise colouring, were found.

### Kitchen

Next to the warehouse, the largest number (107) and variety of buttons were found in the kitchen. Materials included: yellow metal (22), white metal (1), gray metal (3), ferrous metal (11), bone (26), shell (24), white glass (8), yellow and ferrous metal (1), ferrous and fabric (1). Decoration or quality marks were present on a number of specimens and included: a quality mark number 3; design numbers 1 (dog) and 2 (dogs and fox) on two one-piece metal buttons; and design number 2 on one two-piece metal button. Designs on birdcage buttons included numbers 3, 4, and 6. Four yellow metal dome shaped buttons were also recovered.

### Factor's House

A substantial number (72) of buttons was found in various metals including yellow metal (27), gray metal (2), ferrous metal (3), bone (24), shell (10), wood (3), white glass (2), ferrous metal and fabric (1). Of the yellow metal buttons, five were dome shaped. Quality marks found included numbers 1 and 3 (2). One manufacturer's mark number 4 was found. Two metal buttons with fabric were found along with four decorated birdcage buttons in design numbers 2, 3, 4, and 5.

### North Cellar

Few buttons (14) were found in this feature and included: yellow metal (4), ferrous metal (1), bone (3), shell (6). One quality mark number 1 was found.

## 2.2.3 Sewing Equipment

### Straight Pins

A total of 163 straight pins, 151 complete and 12 fragmentary, was recovered. The pins are made of either a yellow metal or ferrous metal, and the heads are attached by one of three methods. These include: (1) the head being part of the mould with the seam present on the head; (2) metal being wrapped around the shaft to produce the head, often with the shaft protruding; and (3) the head being affixed separately to the shaft by soldering. The following numbers were recorded for each type: type 1, 114 yellow metal and 16 ferrous metal; type 2, 5 yellow metal and 1 ferrous metal; and type 3, 20 yellow metal and 7 ferrous metal. Of the type 1 straight pins, a double seam is present on the heads of 62 specimens. The straight pins range in length from 16 mm to 39 mm with a mean of 31 mm.

## Hooks and Eyes

Three eyes and eight complete hooks and one fragment were recovered. The hooks are made of a round yellow metal wire and measure 9 mm (1) and 10 mm (2) respectively. (The measurement for the eyes and hooks was taken from the tip of the rounded end to where the wire bends outward to form two eyes for fastening.)

The eight hooks are made of a yellow metal wire. In six instances the wire is round, while in three cases it has been flattened. They range in size from 9 mm to 14 mm.

One of the hooks, measuring 12 mm, is made of a heavier yellow metal wire that has been flattened and is gilt covered. This would indicate a more decorative closing used on a coat or uniform.

## Needles

Twenty-three sewing needles, ten complete and thirteen fragmentary, were found. They are made mainly of ferrous metal but one of yellow metal is also present. The completed specimens range in length from 30 mm to 65 mm. Fragments include the eye portion (4), shank (2), and the tip (6). One specimen is made of yellow metal, is painted black, and consists of a shank and tip portion. The shank is round with the last 11 mm triangular in shape. The majority (17) of the needles are of the size that would have been used for fine sewing, while the others would have been more suitable for darning or sewing heavier materials.

One needle was found that had been manufactured at the post, from a square nail. This was done by removing the head of the nail and splitting the shank for 15 mm and enclosing the top to make an eye. The completed needle measures 9 cm.

## Bodkin

Three bodkins, used for darning or sewing with wool were found. They are identical, being made of a yellow metal with an ornate leaf and vine design in relief along the length of the shank (Fig. 84). There are two eyes present, a small oval one near the top and a slit one 9 mm below it and a ball at the tip. All measure 6.5 cm in length.

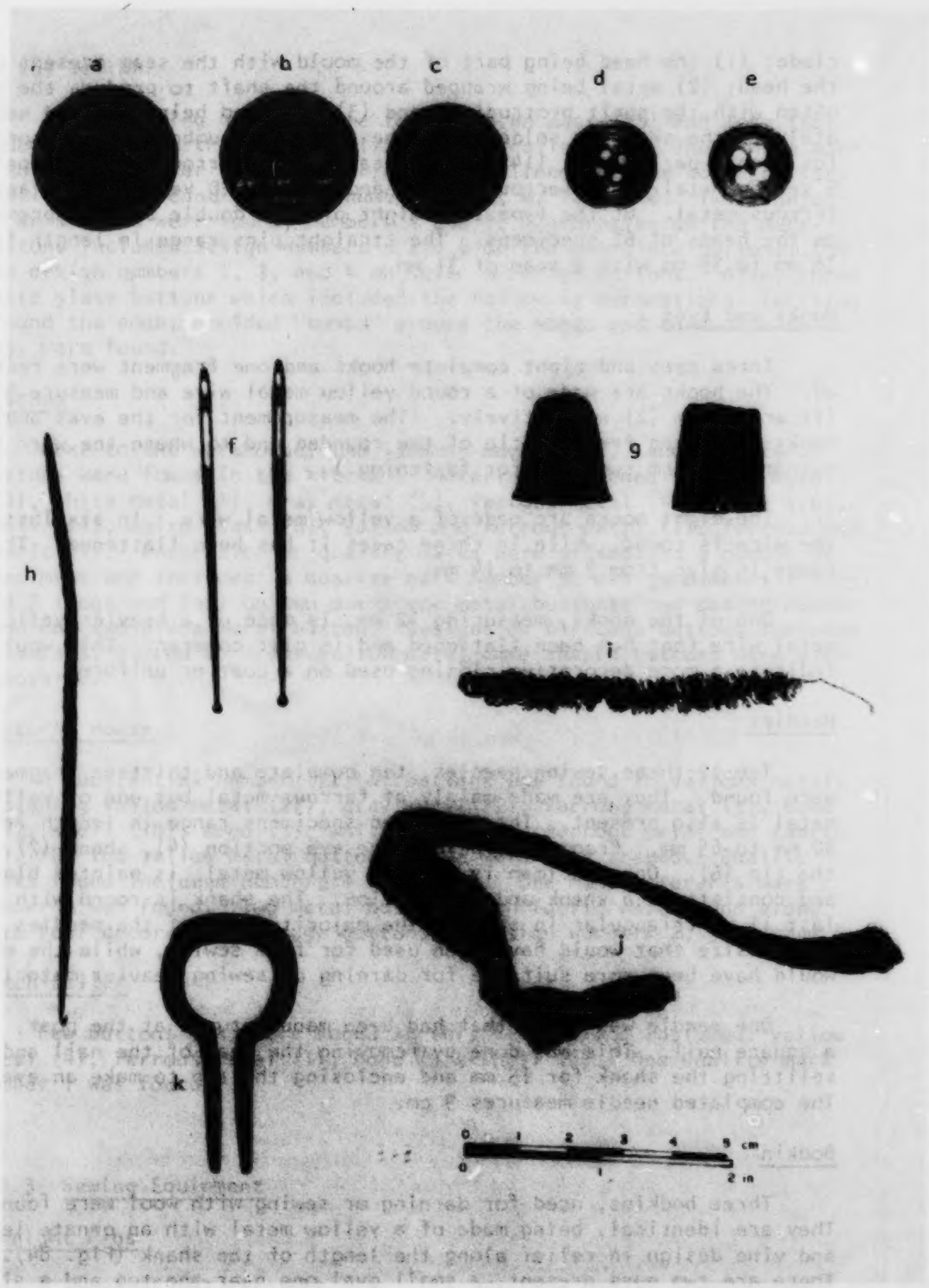

a
b
c
d
e
f
g
h
i
j
k
1:1
0 1 2 3 4 5 cm
0 1 2 in

Figure 84. Various designed metal buttons, a - e; decorated bodkins, f; thimbles, g; crochet hook, h; braid trim made of loops, i; flat braid trim, j; jews harp, k.

### Crochet Hook

One crochet hook (Fig. 84) made of a yellow metal and painted black was recovered. It measures 11.3 cm in length and according to the old English sizing, it would be a size 14 (1973:6). The size of crochet hook would be used for thread and not wool in making lace, edgings, etc.

### Thimbles

Thirteen complete thimbles and three partial thimbles made of either a yellow metal (12) or a combination of yellow and ferrous metal (1) were found. The thimbles are all basically cone-shaped with a circular top and range in length from 17 mm to 24 mm with a mean of 21.5 mm and in width from 17 mm to 19 mm with a mean of 18 mm. The bottoms of the thimbles have either a straight edge (9) or a rolled edge (4). The number of rows of impressed dots encircling the thimble range from 10 to 23, with an average of 14. Designs present on a number of the thimbles include: various numbers of rows of incised short vertical lines (Fig. 84); ovals; or rolled edges with a stamped design and the inscription "LOVE" or "FORGET ME NOT".

### Scissors

Three scissor fragments were found. Two of the scissor parts are made of ferrous metal. One fragment consisted of an arm with an eye. Its total length is 16 cm. The other consists of both arms and one eye. Its overall length is 9.5 cm.

The scissor fragment made of a yellow metal consists of the eye only.

## 2.2.4 Distribution of Sewing Equipment

The majority of the sewing items, except for the hooks and eyes, were restricted to four main areas: the store; the warehouse; the factor's house; and the kitchen. Articles not found in these structures were scattered throughout the post in the early and late palisades, the men's house, the blacksmith shops and the North cellar in which one of the elaborate brass bodkins was recovered. The hooks and eyes were scattered, along with a few straight pins, throughout the post with no significant number found in any one structure or area.

### Store

The largest number and variety of straight pins (81) and sewing needles (14), especially those for fine sewing, were found in the store. Two thimbles were also present in this structure.

### Warehouse

A number of straight pins (49), the majority (5) of the thimbles and the scissor fragment made of a yellow metal were found in the warehouse. The straight pins were concentrated in the area of the west foundation wall along with one thimble. The remaining thimbles were found in the North cellar. No sewing needles were recovered from this structure.

### Factor's House

A number and variety of sewing items was retrieved from this structure. These included: 21 straight pins, of which 15 were of yellow metal; five sewing needles (3 fine sewing and 2 darning); the crochet hook; the large square nail which had been refashioned into a crude needle; and one scissor part. No thimbles were recovered from this structure.

### Kitchen

Four thimbles, one straight pin and one scissor part were recovered from the kitchen. No other items associated with sewing activities were found here.

## 2.2.5 Braid Trim

Two types of braid trim were found. The first consists of small yellow metal loops attached to a central wire (Fig. 84). Two pieces were found, 6.5 cm and 3 cm long. Both are 5 mm wide. The second type of braid found is made of a yellow metal thread (Fig. 84), and is 1.3 cm wide. Eight pieces of braid were found ranging in length from 3.5 to 62 cm.

## 2.2.6 Fabric

Five fragments of fabric were recovered. Two pieces are attached to opposite ends of a strip of yellow metal. One piece consists of silk/cotton-like fibres woven in a plain basket-weave pattern. The other piece is made of thicker wool-like fibres woven in a "herringbone" pattern. The remaining three pieces of fabric are woven in a single basket-weave pattern, two with wool-like fibres and one with silk/cotton-like fibre.

### 2.2.7 Leather

Nine pieces of leather were found. Eight of the pieces represent fragments. One is a large piece of leather which had been folded five or six times. Measurements were not possible as the leather was extremely brittle and was, therefore, not unfolded.

### 2.2.8 Distribution of Braid Trim, Fabric and Leather

The largest amounts of leather, fabric and braid fragments were found in the kitchen. Both types of braid were found here as well as the strip of yellow metal with the fabric at both ends. The large piece of leather was also found in this structure. The remaining leather fragments were found in the warehouse, while the remaining cloth and braid pieces were recovered in the store and the factor's house.

### 2.2.9 Buckles

Buckles found at Fort Pelly 1 fall into two categories "belt" buckles and delicate clothing buckles. A total of 10 "belt" buckles made of ferrous metal were recovered in various shapes: rectangular (5); square (1); semi-round (1); rectangular with indented top and bottom (2); and oval (1). The rectangular buckles have one to four pins (for inserting into the belt holes) present and range in size from 3 cm to 6 cm in length and 1 cm to 4 cm in width. The semi-round buckle has one pin and measures 3 cm by 2.5 cm. The square buckle has no pins present and measures 5 cm. The rectangular buckles with indented tops and bottoms measure 3 cm by 1 cm and have two pins present. The oval buckle which is broken has a bar located, horizontally, through the centre.

Four delicate clothing buckles were found. Three are made of ferrous metal and one is made of a yellow metal. Two of the ferrous metal buckles are rectangular in shape, one with rounded and one with square corners, and both have a bar located horizontally through the centre. They measure 1.7 cm by 1 cm and 1.6 cm by 1.2 cm in size. The third ferrous metal buckle is square, 1.5 cm in size, and has a bar through the centre with two pins attached. The yellow metal buckle is rectangular in shape, measuring 1.5 cm by 1.1 cm, with a bar located horizontally through the centre. A scroll design is found along the edge.

### 2.2.10 Distribution of Buckles

The largest number of buckles was found in the kitchen and included four "belt" buckles and the ornate delicate buckle. In the warehouse three buckles, two "belt" and one delicate, were found. The remaining buckles were found in the store (2), early blacksmith shop (1), factor's house (1), early east palisade (1) and west palisade (1).

### 2.2.11 Shoe Parts

A total of 35 various shoe parts was recovered including: outsoles (10); outsole and heel lift (5); outsole, insole and heel lift (2); heel lifts (10); heel lift and leather upper (1); leather upper with yellow metal eyelets (3); and leather upper fragments (4). Three processes of manufacture are evident on the shoes from Fort Pelly 1: (1) the outsole is attached to the upper by nails, which are made of a ferrous metal and have square heads; (2) the outsole is machine-stitched to the upper except around the toe and heel which are nailed; and (3) the outsole is completely stitched to the upper. The breakdown of the various manufacturing techniques present on the shoes is provided in Table 25 along with the shape, right or left shoe, and size, adult or child, when possible. According to Anderson (1968:64), shoes which were stitched except for the toe and heel may be dated before 1862, while completely stitched shoes can be dated ca. 1862 and after. Also, until as late as 1860, no distinctions were made between right and left shoes (Anderson 1968:59).

### 2.2.12 Distribution of Shoe Parts

The majority of the shoe parts were recovered from three structures: the North cellar (6); the factor's house (17); and the kitchen (7). Parts found in the North cellar included three children's shoe parts and two adult, plus a piece of leather with eyelets. All three methods of shoe manufacture were present in this structure. In the warehouse, a variety of shoe parts were found, all from adult shoes except for a heel lift of a child's shoe. The manufacturing technique present on all of these was type 1, with the outsole nailed to the upper. Shoe parts in the kitchen consisted of heel lifts, leather fragments with eyelets and two children's outsoles, one manufactured by the type 1 technique. The remaining shoe parts were distributed in the north palisade (1), the warehouse (2), the stable (1) and Square 43L05 (1).

TABLE 25

Manufacturing Techniques Employed on Shoes

| Manufacturing Technique | Shoe Part<br>O | O/HL | O/J/HL | Shape | Size | L x W (cm) |
|---|---|---|---|---|---|---|
| 1 | | | 1 | right | child | 16.5 x 6 |
| | | 1 | | right | adult | 20 x 7.5 |
| | 2 | | | - | - | - |
| | | 1 | | left | adult | 26 x 7.5 |
| | | 2 | | left & right | adult | 27 x 9.5 |
| | 1 | | | - | child | - |
| 2 | | 1 | | right | adult | 24 x 7 |
| | | | 1 | left | adult | 26 x 8 |
| | 1 | | | left | adult | - |
| | 1 | | | right | adult | 27 x 7.5 |
| 3 | 1 | | | left | child | 17.5 x 4.5 |

O = outsole; O/HL = Outsole/Heel Lift; O/I/HL = Outsole/Insole/Heel Lift

## 2.3 Social/Leisure Related Artifacts

A very few artifacts belonging to this group consisted entirely of musical items: mouthpiece fragments from a harmonica and jews harps. The three harmonica mouthpiece parts are made of a gray metal strip 2 cm wide. No other attributes were observed due to the fragmentary nature of the pieces. The two complete and two partial jews harps are made of a gray metal. They are diamond-shaped in cross section, with tapered shanks and a round frame head (Fig. 84). The two complete specimens measure 5 cm by 2.5 cm and 4.8 cm by 2.7 cm.

### 2.3.1 Distribution of Social/Leisure Artifacts

The three harmonica mouthpiece fragments were found in the west palisade. The two complete jews harps were found in the store and the men's house, while the remaining two had been discarded in the north palisade (Sq. 40R03) and square 25t.

# APPENDIX 3

# HUNTING, SUBSISTENCE AND TRADE GOODS

## 3.1 Hunting and Subsistence Artifacts

### 3.1.1 Gunflints

The gunflints found at Fort Pelly 1 represent blade flints made at Brandon, England. In general, the techniques used to fashion these consist of breaking long slender blades struck from a prepared core into short sections (Hamilton 1965:53). As a "micro-burin technique" for separating the blades into segments was used, the need for retouching a flint to shape was eliminated (Hamilton 1965:36). Detailed accounts of the history and techniques of gunflint knapping have been discussed by Witthoft (1966) and Hamilton (1965).

The flint used in Britain ranges in colour from gray to black and is translucent in thin sections and has a rather flat, matted appearance (Hamilton 1965:53). Characteristically, the gunflints have well defined sharp parallel ridges on the convex surface and the presence of a percussion scar on each side at the "bed" level (Hamilton 1965: 53). These scars were noticeable on 30% of the gunflints. Witthoft (1966:37) notes that the Brandon industry never became an important source for military flints, as did the French shops, but figured prominently in the export to "English dominated lands where flints were retailed by British merchants" (Witthoft 1966:37). Also, the Brandon gunflint industry was closely associated with the production of trade guns in Britain.

A total of 261 gunflints and fragments was recovered from Fort Pelly 1. The gunflints are analyzed according to: form, based on the method of manufacture; shape based on the longitudinal cross section dimension of a gunflint; colour; size consisting of measurements along the axis of the gunflint which is parallel to the gun when mounted in a lock, width and thickness of complete specimens. Table 26 lists the type (form), colour, and shape of the gunflints recovered, while Table 27 provides the size, range and mean, colour and shape for complete gunflints. The various gunflint shapes found are illustrated in Fig. 85. Gunflints in various shades of gray flint in style 4 and 6 are the most common found.

### 3.1.2 Percussion Caps

During the 1800s, alternative means for producing a flash and

TABLE 26

Blade Gunflints: Breakdown by Shape and Colour

| Shape | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Colour | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Black | 1 | | | 1 | | | | | 2 |
| Gray & Black Mottle | 1 | | | | | 1 | | | 2 |
| Dark Gray | 3 | 1 | | 19 | | 6 | | 1 | 30 |
| Light Gray | 2 | 4 | 3 | 12 | | 3 | | 1 | 25 |
| Gray | 2 | 5 | 2 | 4 | 1 | 6 | 1 | 3 | 34 |
| Tan & Gray Mottle | | 1 | | 2 | | | | | 3 |
| Dark Brown | | | | 2 | | 1 | | | 3 |
| Light Gray & Dark Gray Streaks | | | | 1 | | | | | 1 |
| TOTAL | 9 | 11 | 5 | 51 | 1 | 17 | 1 | 5 | 100 |

igniting the powder were being invented and tested. One system which proved effective was the copper percussion cap. Wilkinson (1973:44) provides the following description of the percussion cap system:

> The cap consisted of a small tube closed at one end, on which was deposited a thin coating of fulminate. The cap was placed over a small tube -- the nipple -- with a tiny hole drilled through it leading into the breech and so to the charge of the powder. A solid nosed arm, the hammer replaced the cock and flint and this struck the cap to force it against the nipple and so detonate the fulminate. To prevent accidents which could be caused by the cap splitting, the nose of the hammer was hollowed out so that the tip enclosed the cap and nipple ... Another virtue of the new system was that flintlock weapons could easily be converted by the pillar method. Frizzen, spring and pan were removed and the cock was replaced by a hammer.

Twenty percussion caps were found at the post. The percussion cap

TABLE 27

Blade Gunflints: Breakdown by Shape, Size Range and Mean, and Colour

| Shape | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Colour | *L x W | L x W | L x W | L x W | L x W | L x W | L x W | L x W |
| Black | 27 x 23 | | | 22 x 19 | | | | |
| Gray/Black | | | | | | | | |
| Mottle | | | | | | | | |
| 1 only | 34 x 24 | | | | | 28 x 24 | | |
| Dark Gray | | | | | | | | |
| Range | 22-27 x 20-21 | | | 15-29 x 13-24 | | 19-31 x 19-23 | | |
| Mean | 24.5 x 20.5 | | | 22.5 x 18.7 | | 24 x 20 | | |
| 1 only | | | | | | | | 19 x 15 |
| Light Gray | | | | | | | | |
| Range | | 22-26 x 18-20 | | 20-29 x 18-22 | | 27-32 x 22-24 | | |
| Mean | | 24 x 19.3 | | 26.7 x 20 | | 29.3 x 23 | | |
| 1 only | 29 x 22 | | 29 x 23 | | | | | 25 x 22 |
| Gray | | | | | | | | |
| Range | | 22-23 x 20-22 | | 17-26 x 14-23 | | 26-27 x 18-23 | | 21-29 x 19-21 |
| Mean | | 22.5 x 21 | | 22.5 x 20 | | 26.5 x 20.3 | | 27 x 19.6 |
| 1 only | | | 26 x 20 | | 25 x 19 | | 23 x 19 | |
| Tan/Gray | | | | | | | | |
| Mottle | | | | | | | | |
| 1 only | | 29 x 22 | | 29 x 23 | | | | |
| Dk. Brown | | | | | | | | |
| 1 only | | | | 26 x 18 | | 25 x 18 | | |
| Lt. & Dk. Gray | | | | | | | | |
| Streaked | | | | | | | | |
| 1 only | | | | 22 x 17 | | | | |

*Size is recorded in mm. Lt.= Light; Dk. = Dark

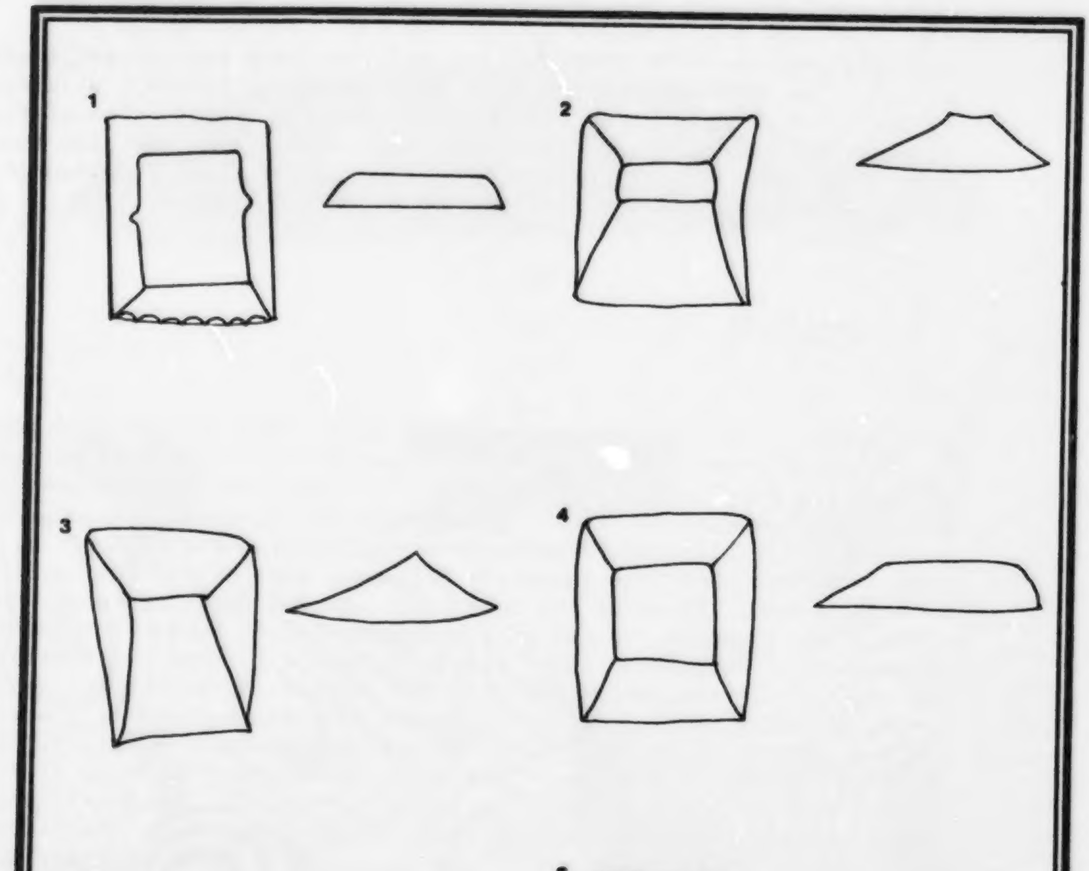

1
2
3
4
5
6
7
1
2
1
2
8
Not drawn to scale

Figure 85. Gunflint Shapes found at Fort Pelly 1.

made its appearance in 1820, but the military were slow to adopt the system. The British army did so in 1839 (Witthoft 1966:37; Wilkinson 1973:44). According to Hanson (1955:18-19), the introduction of the percussion trade gun in North America occurred in 1861 and even though there were more "advantages to the system the flintlock remained in favour with the Company's northern and western customers...".

### 3.1.3 Gun Parts

#### Locks

Hanson (1955:36) states that until about 1860, all British sporting flintlocks were "of the slightly rounded-plate type with pointed tail at the rear" and that "the later flintlocks had rounded ends". Rarely are complete flintlocks found as it was customary to repair guns and strip all useable parts before discarding the lock plate. Five lockplates and five lockplate fragments made of ferrous metal were recovered. Three of the lockplates are extremely corroded, however, their shape is typical of those described by Hanson for locks until about 1860. These three specimens have a rounded plate with a pointed tail at the rear. One of these lockplates has the frizzen spring attached, while another is almost complete except for the vise jaw and hammer. On one of these lockplates, the maker's mark "W CHANCE & SON" (Fig. 86) is present. This is a Birmingham firm which filled large orders in the mid 1800s for the P. Choteau Co., an American concern involved in the western fur trade (Hanson 1955:26). The fifth lockplate is not corroded and is typical of those found on later guns (post 1860). It has a rounded tail rather than a pointed one. Unfortunately no maker's mark or date is present.

Five lockplate fragments were found. Three consist of the slightly rounded end and one still has the frizzen attached (Fig. 86). One specimen represents the pointed tail end of a pre-1860s gun. The fifth lockplate fragment is extremely corroded with both ends missing.

#### Tumblers

One complete tumbler (Fig. 86) and one partial tumbler were recovered. The complete tumbler measures 2.7 cm in length and the pin is present. The partial tumbler belongs to a larger gun as the fragment measures 2.7 cm in length.

#### Springs

##### Sear Springs

One complete sear spring (Fig. 86), measuring 3.3 cm in length from the ends to the bend, and one partial sear spring were found.

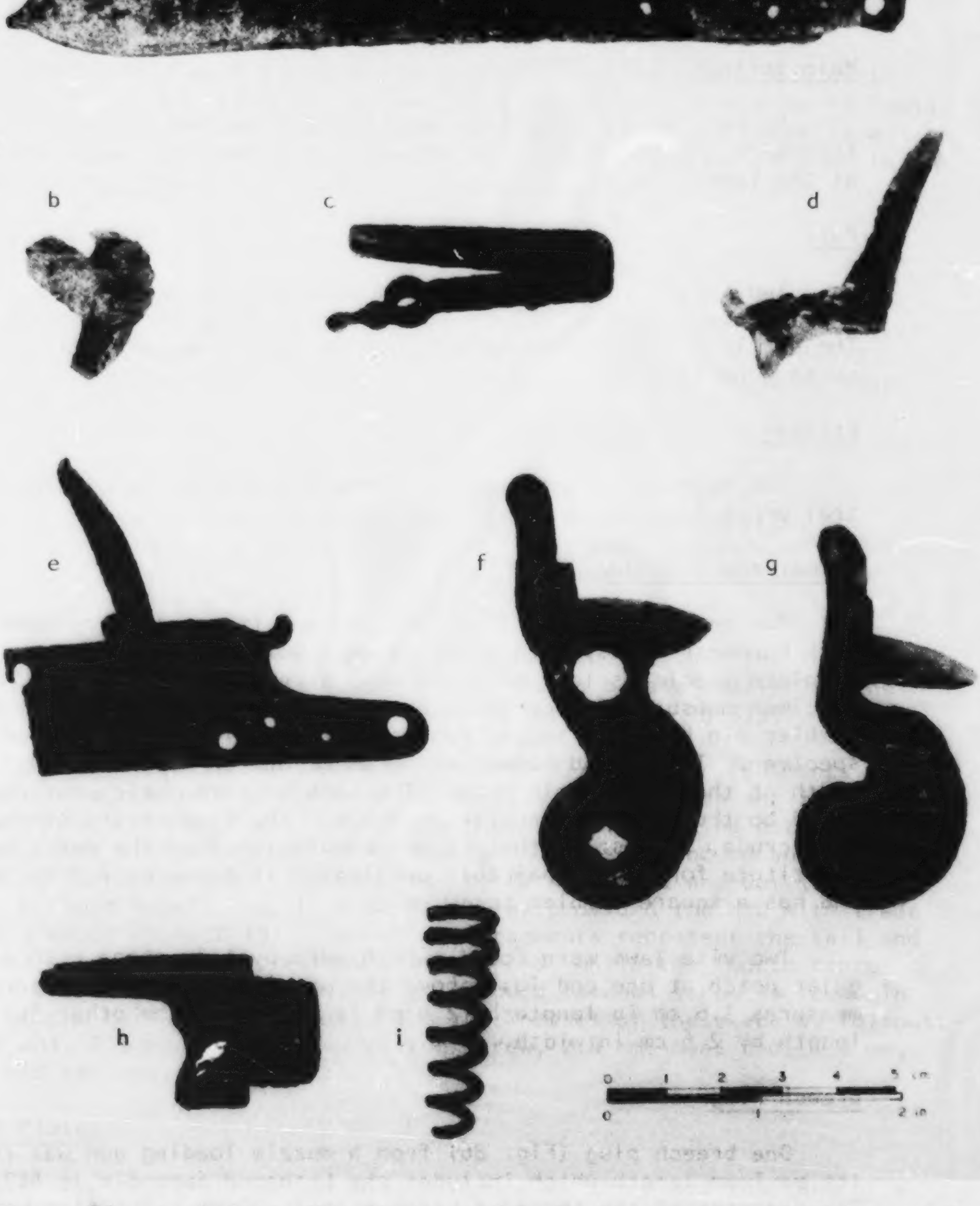

a
b
c
d
e
f
g
h
i
0 1 2 3 4 5 cm
0 1 2 in

Figure 86. Lockplate, "W. Chance and Son", a; tumbler, b; sear spring, c; frizzen, d; lockplate and frizzen, e; gooseneck hammers, f & g; breech plug, h; gun worm, i.

### Frizzen Springs

Three complete and two partial frizzen springs were found. The complete specimens measure 5.1 cm, 5.2 cm and 5.3 cm in length from the furthest end to the bend. The two partial springs have been broken at the bend.

### Main Springs

No complete main springs were found. Two partial main spring fragments, measuring 8 cm in length were recovered. Both are broken at the bend.

### Pans

Two complete specimens and one partial pan were recovered. The complete pans measure 2.7 cm and 3.2 cm in length and 2 cm in width. The partial fragment measures 2.7 cm in length and probably also measures 2 cm in width.

### Frizzen

Two corroded frizzens, 3.5 cm and 6.5 cm high (excluding the ventral projection for a pivot) were found.

### Hammer and Vise Jaws

Two nearly complete (Fig. 86) and one fragmentary rounded gooseneck hammers (cocks) with a single neck were recovered. Two nearly complete specimens lack only the vise screw and the vise jaw. One specimen measures 7.7 cm in height and is 2.6 cm wide, across from the tumbler pin hole. A square tumbler screw would have been used for this specimen. The second hammer measures 6.7 cm in height and 2.7 cm in width at the tumbler pin hole. The tumbler screw which has become fused to the cock is circular in shape. The fragmentary hammer is very crude, suggesting that it was manufactured at the post, as a substitute for an unrepairable original. It measures 2.4 cm in width and has a square tumbler screw hole.

Two vise jaws were found, which were oval in shape with a rectangular notch at one end just above the opening for the vise screw. One measures 3.6 cm in length by 2.4 cm in width and the other 3.4 cm in length by 2.6 cm in width.

### Breech Plug

One breech plug (Fig. 86) from a muzzle loading gun was recovered. Its maximum length which includes the L-shaped appendix is 4.7 cm. The diameter of the threaded screw part is 13 mm. The plug was screwed into the end of the barrel to keep the powder from going out of the barrel.

## Yellow Metal Escutcheon

A fragment of brass with a stud (8 mm) protruding from one side may represent an escutcheon.

## Gun Sight

This consists of a rectangular piece of yellow metal, 6.6 cm in length and 1.3 cm in width. A slot, 3.5 cm long and 3 cm wide is found in the centre. At one end on the underside of the sight there is a protuberance 5 mm long and 7 mm wide, into which an iron rod 3 mm in diameter was fitted and probably attached the sight to the gun.

## Serpent Side Plates

This design was popular in the late 17th century and appeared on the Dutch style English-made muskets issued in the early years of Queen Anne's reign (Hanson 1955:38). Keith Neil (cited in Hanson 1955:39), Master of the Worshipful Company of Gunmakers, London, explains that:

> The Serpent side plate to be seen on the English made (trade) muskets is a survival of the prototype sent out to America about 1700. It is in fact a copy of the side plate of a Queen Anne light musket. It became known from the first ones sent out and 'survived' long after it had disappeared in the service arms in this country.

The early side plates were thinner in cross section than the later ones (post ca. 1826). Also the serpent side plates became smaller in the 1860-1867 period as the locks became smaller (Hanson 1955:39).

One complete serpent side plate (Fig. 87) and four fragments were found. The complete specimen measures 15.4 cm in length and is 1.9 mm thick. Some of the details have been worn smooth, making detailed comparisons difficult, but it is similar to those found on an 1872 gun made by Barnett and an 1852 gun made by Parker Field and Co. (collection of Norm Nagel). Both these companies provided the HBC with trade guns (Hanson 1955:18-19). Two of the fragments represent the tail end of the serpent, one represents the head end, while the fourth represents a mid-section. An extremely corroded ferrous screw is found in one of the tail end fragments. The thicknesses of these are as follows: tail end, 2.5 mm; tail end with iron screw, 2.4 mm; head end, 1.8 mm, and mid-section, 2.2 mm.

## Butt Plates

A complete yellow metal butt plate, plus the short top tang of a second yellow metal butt plate were found. On the complete specimen (Fig. 87), six square holes set around the edge for spikes are found, and one circular screw hole is set in the centre, 2.5 cm from the end.

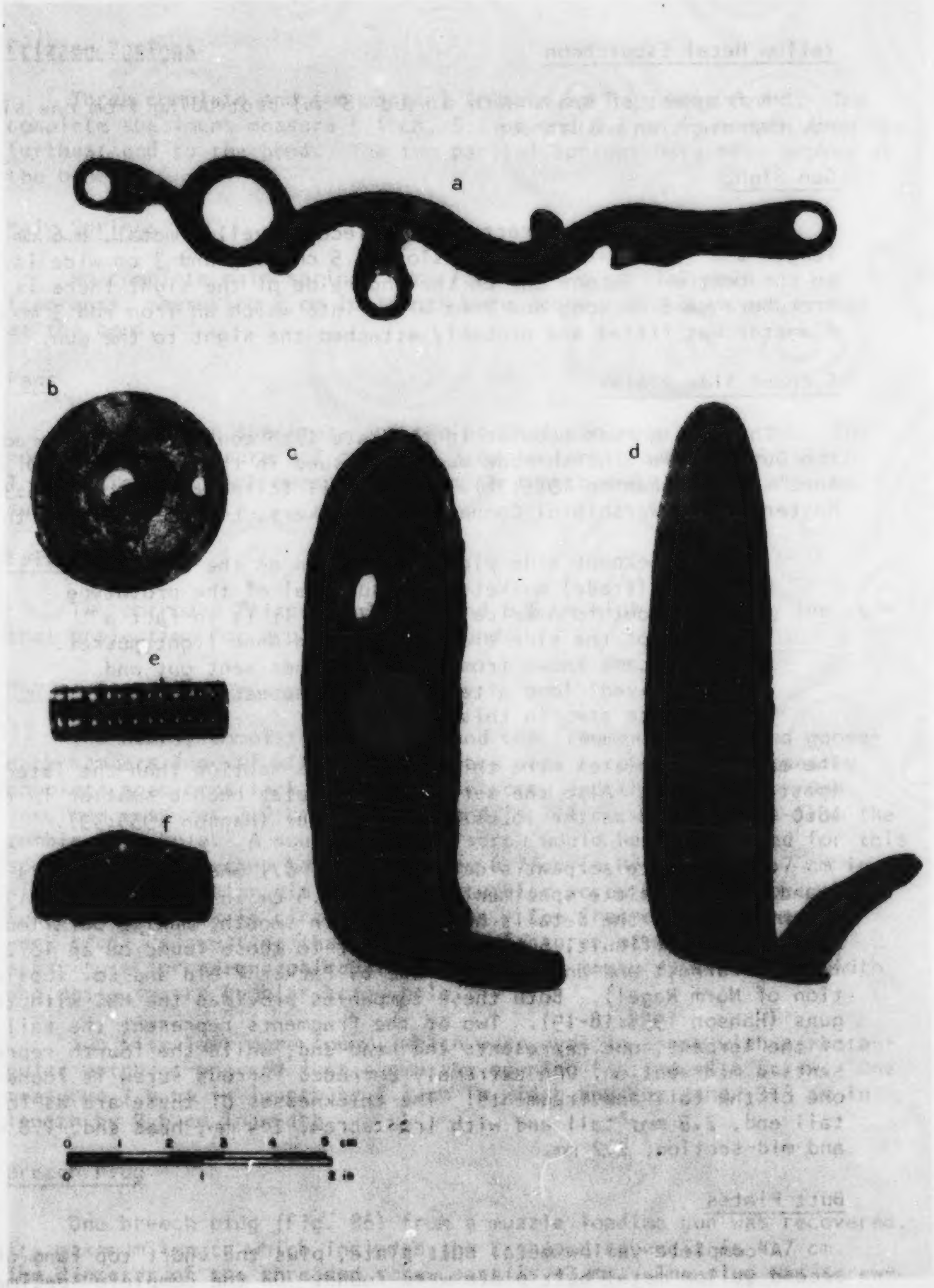

a
b
c
d
e
f
0 1 2 3 4 5 cm
0 1 2 in

Figure 87. Serpent side plate, a; ornate powder horn cover, b; ferrous metal butt plate, c; yellow metal butt plate, d; ram pipes, e & f.

A circular hole is found in the tang. Hanson (1955:40) notes:

> All Northwest guns had flat butt plates of heavy sheet brass with a short flat top tang. As late as 1826 this plate was fastened on with small square iron spikes, six or seven being set around the edge and one driven in the top tang. Later specimens of HBC guns are distinguished by five butt plate screws similarly placed -- four around the butt plate proper and one in the tang... The conventional pair of screws -- one in the plate and one in the tang -- are found on all other types sold or given out in the United States, even on English-made models.

According to Hanson's description, the above butt plate found at Fort Pelly would date to the establishment and early years of the post's occupation (1820s & 30s). The short top tang fragment found is similar to the later one and has one circular hole.

A second complete butt plate (Fig. 87) was recovered. Although it is generally similar in shape, it differs greatly from the first in a number of respects. It is made of ferrous metal and not yellow metal; consequently, it is extremely corroded. There are only two large circular holes, 11 mm in diameter, one in the butt plate proper and one in the tang. Being made of ferrous metal, this butt plate may have been fashioned by the resident blacksmith to replace a broken or lost yellow metal butt plate.

## Trigger Guards

Three styles of trigger guards were identified from the post (Fig. 88).

Style A. Only one example of this style was found. It is more elaborate than the rest, being made of a heavy yellow metal. No markings or decoration are evident.

Style B. Only one example of this style was recovered. It is made of ferrous metal, but is more elaborate than the Style C which is the most common. This specimen has a ring attachment on the longer rear tang. This ring is attached to a piece which is inserted into the finial immediately below the bow. The rear tang consists of a small, notched, roughly oval-shaped piece, attached separately to the guard. This trigger guard is much smaller in size than the Style C.

Style C. This style was the most numerous recovered and represents the more typical trigger guard found on trade guns. Hanson (1955:41) notes that the stubby rounded-end finials on ferrous metal trigger guards of the late 18th century were lengthened "gracefully" by the 1790s and that the new style persisted to the end. Trigger guards varied slightly on the different types of guns and, therefore, do not

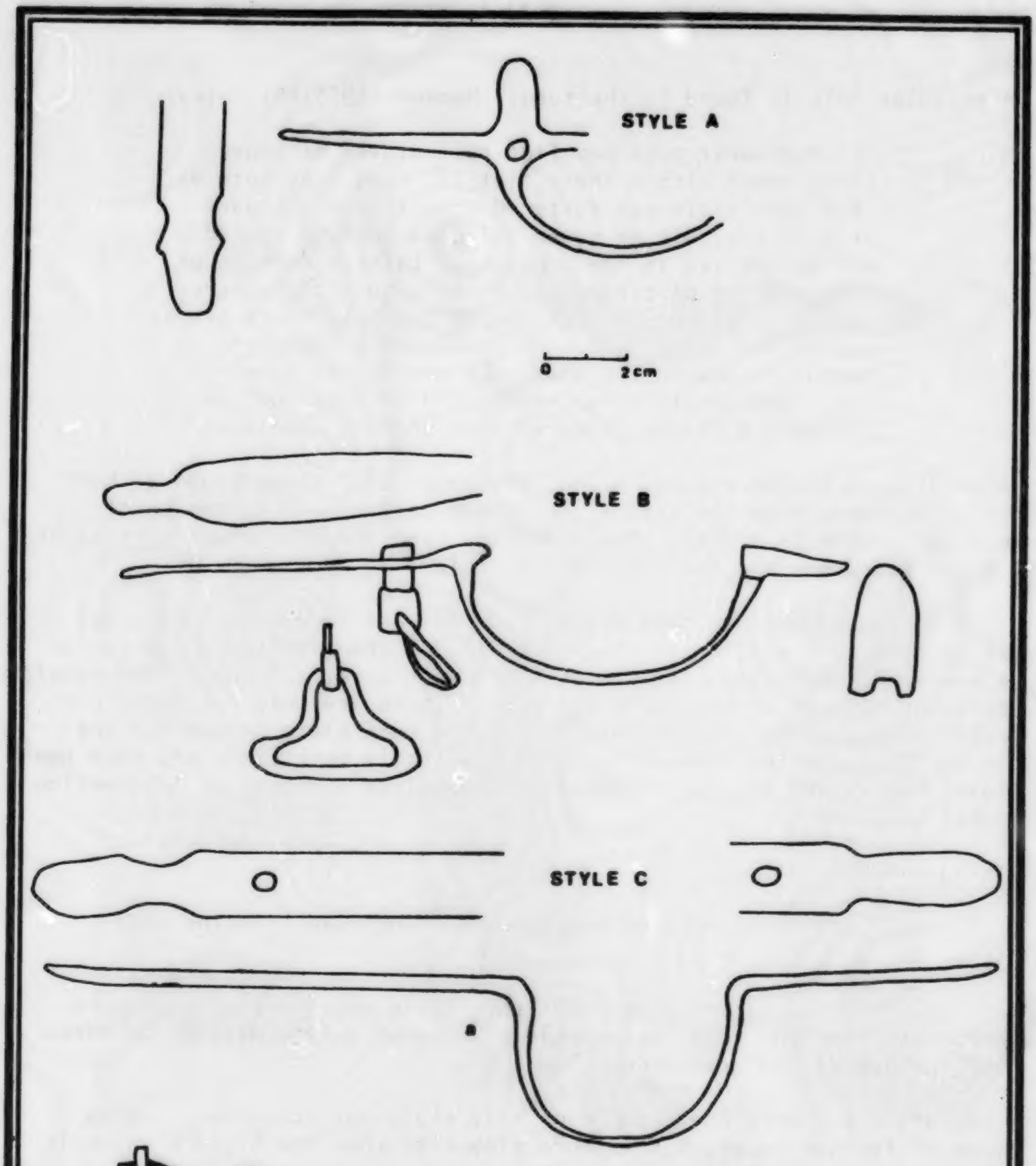

STYLE A
0
2cm
STYLE B
STYLE C
a
b

Figure 88. Various Trigger Guards found at Fort Pelly 1.

provide a reliable guide for identification (Hanson 1955:41).

Three complete style C trigger guards and one partial trigger guard were found. One specimen is broken at the bow and has a wood screw present on the longer front tang. This specimen also has a rectangular piece of iron 3 mm thick and 2.5 cm long with a rounded end inserted immediately beside the bow on the shorter front tang. A piece of broken iron wire is inserted in this and may have held a ring as in style B. One of the complete specimens is extremely mangled at the ends. Three finial fragments with the holes partially or completely visible were also found. With respect to length and attachments, the style C corresponds in general to Hanson's (1955:41) identification: "The guards were always held on by two or three plain wood screws and were usually about 9¼ inches over-all. The pointed finials at the tangs averaged about 1½ inches long." All of the trigger guards examined were corroded, except for the one made of yellow metal.

## Triggers

Nine complete triggers representing seven different styles were recovered. These are illustrated and described in Fig. 89. Styles 1, 2, and 3 are similar in shape, with the pull being slightly curved and oval in cross section. No pin or pin hole is evident on most of the triggers due to corrosion, except for styles 6 and 7 in which case the pins are present.

## Gun Barrels

The gun barrels recovered at the post are extremely corroded and consist of two complete and eight broken specimens. Because of the corrosion, the bore diameters are difficult, if not impossible, to establish and, therefore, the measurements given are only a rough estimate. The complete gun barrels measure 37 cm (14.8") and 87 cm (34.8") in length and are circular. No octagonal shaping at the breech is evident. Hanson (1955:39) notes that "all of the trade guns examined were octagonal for about seven inches at the breech, this octagon became sixteen-sided and then terminated in two or three circular ridges". The octagonal shaping of the barrels is obscured by the corrosion. On one specimen, a 3.3 cm projection is evident at the breech end with a circular hole for attachment to the stock. The bore diameter is ca. 12 mm. A second gun barrel which is broken at both ends measures 33.5 cm. The end near the breech has been flattened. The bore diameter is ca. 14 mm. The remaining fragments consist of 8 mid-sections, ranging in length from 4.5 to 33.5 cm with bore diameters of ca. 14 or 15 mm. One fragment of the breech end of the barrel was found, and is extremely corroded.

## Ram Pipes

Four ribbed yellow metal intermediate and upper ram pipes were recovered. These consist of cylindrical tubes 3.4 cm in length. Three

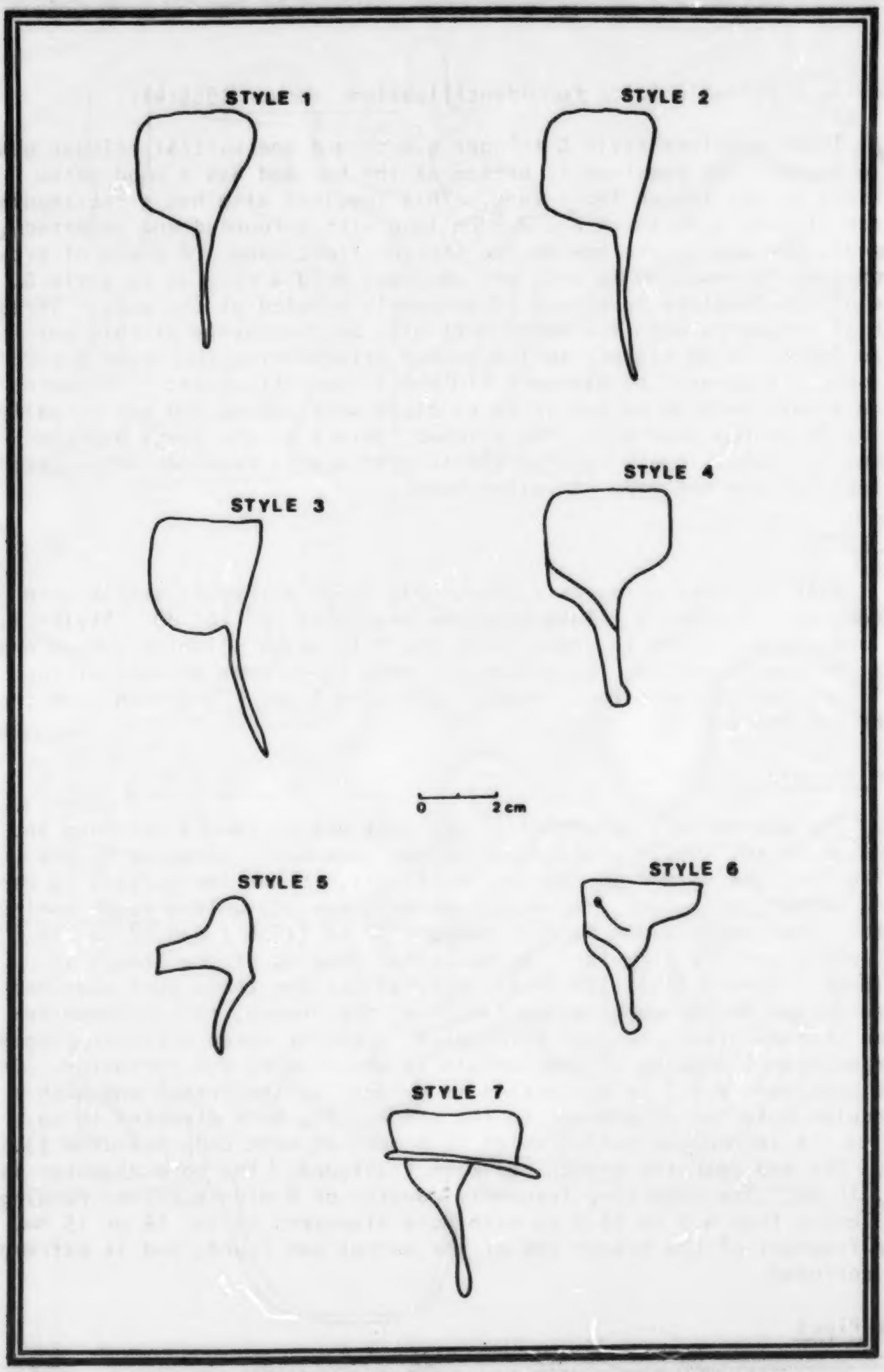

STYLE 1
STYLE 2
STYLE 3
STYLE 4
0
2 cm
STYLE 5
STYLE 6
STYLE 7

Figure 89. Various Trigger Styles found at Fort Pelly 1.

of these have a flat extended piece, triangular or rectangular in shape, with a perforation (Fig. 87). These are used to attach the pipes to the gun. Two of these ram pipes are badly crushed. The fourth specimen does not have this extended attachment piece (Fig. 87). It is possible that this piece could have been used as a decorative item. No rear ram pipes were found.

### Gunworms (Fig. 86)

Six coils of gunworm fragments were found at the post. These range in length from 13 mm to 44 mm and were used to remove wadding from a muzzle loading gun.

## 3.1.4 Accessories

### Powder Flasks/Horns and Brass Cover

In order to carry a supply of powder essential for shooting, powder horns or flasks appeared. Anything from an "animal horn, to a seed gourd or an elaborate copper or brass flask could be used" (Wilkinson 1973:22). The powder receptacles found at Fort Pelly consist of three tip fragments. These are fashioned from three different materials, cow horn, wood, and bone, and range in size from 3.1 cm to 4.2 cm. One ornate yellow metal powder horn/flask cover was found (Fig. 87). Embossed around the edge is an elaborate leaf pattern design. The cover has a diameter of 4 cm with a central opening of 7 mm in diameter. A small protuberance 1 cm long with a 3 mm opening is located towards the edge of the cover.

## 3.1.5 Ammunition

### Lead Shot

Lead shot of which 321 pieces were recovered, vary in size from 3 mm to 6 mm. The following numbers for the various sizes are found: 3 mm -- 19; 3.5 mm -- 23; 4 mm -- 136; 4.5 mm -- 64; 5 mm -- 77; 5.5 mm --0; 6 mm -- 2. The smaller shot (3 mm - 4 mm) represents the majority (55.76%). Noble (1973:122) notes that these sizes are convenient for shooting duck, grouse, pheasants, pigeons, or other upland game birds, while the larger shots between 4.5 mm and 6 mm are effective in shooting geese, swans, cranes or other small game such as rabbits and beaver.

### Musket Balls

A total of 56 musket balls was recovered. The majority (42) measure 14 mm in diameter. Six measure 15 mm and two measure 8 mm and

9 mm respectively. The remainder are either flattened or fragmentary. One of the smaller musket balls, measuring 9 mm, has a hole drilled through the centre, possibly for use as an ornament. The majority were found in the warehouse scattered throughout the foundation, with the largest concentration in the north cellar.

### Lead Sprue

A sprue refers to the tail of lead, which is formed during the process of bullet making. Lead is poured into the cavity of the bullet mould and the sprue represents the lead that filled the channel leading into the cavity and had to be cut off (Wilkinson 1973:23). These sprues consist of narrow lead bars, with perpendicular projections representing the mould apertures (Kidd 1970:76). Seven lead sprue remains were found at the post ranging in length from 2 cm to 5.7 cm.

## 3.1.6 Distribution of Hunting and Subsistence Artifacts

### Early Palisade

Only one gun part, a partial tumbler was recovered in the area where the original 1824 north palisade existed. Also seven lead shot, three musket balls and a number of gunflints were found in the early palisade.

### Later Palisade

Various gun parts (9) and two powder horns (wood and horn) were recovered from the east, west and south palisades, with the majority being found in the west palisade. Ten gunflints plus a number of fragments, twenty-three lead shot and nine musket balls were found scattered throughout the palisades with the majority found in the western extension of the north palisade. Two percussion caps were also found in the north palisade.

### Stable

Only four gunflints and a number of fragments were found in this area.

### Early Blacksmith Shop

A great number (13) and variety of gun parts were recovered in the blacksmith shop as expected. The majority of lockplates were found in this structure (both the pre- and post-1860 styles), and may represent those locks discarded after useable parts had been salvaged. Four gunflints and a number of fragments and the powder horn made of bone also were located here.

## Men's House

A variety of gun parts (9) including the yellow metal trigger guard and the complete serpent side plate was recovered in this structure. The lockplates found consisted of the pre-1860 style described by Hanson (1955:36). A number of gunflint fragments, two lead shot and one musket ball were also found.

## Kitchen

A great variety of gun parts (11) including the complete yellow metal butt plate, two styles (B & C) of trigger guards and the ornate yellow metal powder horn cover and a complete gun barrel was recovered in the kitchen. Twelve gunflints and a number of fragments, plus 74 lead shot and five musket balls were also found.

## Factor's House

Gun parts recovered from this feature were varied and included: the gun sight; two yellow metal serpent side plate fragments; the yellow metal butt plate tang fragments and a ribbed ram pipe. Twelve gunflints plus a number of fragments, two lead shot and seven musket balls were also found.

## Trading Store

A few gun parts, including two gunworm fragments, were found in the cellar and hearth area of the store. Eighteen gunflints (which is second in number to the warehouse) and a number of fragments, 93 lead shot, eight musket balls and three lead sprue were also recovered. The largest number of percussion caps (15) came from the store.

## Warehouse

A variety of gun parts, including the ferrous metal butt plate and yellow metal serpent side plate fragments, was found scattered throughout this structure. Twenty-four gunflints and a number of fragments, 91 lead shot and seventeen musket balls were also scattered throughout with the largest concentration in the north cellar.

## North Cellar

The lockplate with the manufacturer's mark "W CHANCE & SON", plus a complete gun barrel, frizzen and style C trigger guard were recovered. Two gunflints and a number of fragments were also found with no lead shot or musket balls present.

### 3.1.7 Fish Hooks and Spears

A total of six hooks and three spears was found. The fish hooks consist of round pieces of ferrous wire with one end curved and barbed. The wire varies in thickness from 2 mm to 4.7 mm. One complete hook (Fig. 90) is 8 cm long and has a piece of lead wrapped around the top to act as a weight. Two additional lead patches used as weights were also found.

The spears (Fig. 90) are made from a flat strap of ferrous metal, 7 mm to 9 mm thick, and 2 cm wide, and have a single barb ranging from 2 cm to 4.5 cm in length.

### 3.1.8 Bone Harpoons

Two bone harpoons, one complete and one partially complete were recovered. The complete harpoon is 20.2 cm long and has a double barb present 9 cm from the sharpened end. The other bone harpoon differs from the first having only one barb. It measures 23.75 cm in length and the barb is located 8 cm from the sharpened end.

### 3.1.9 Distribution of Fish Hooks, Spears and Bone Harpoons

The fish hooks, spears and bone harpoons were found in six features as follows: factor's house, one fish spear and one hook; warehouse, two fish hooks including the one with the lead weight and one lead weight; men's house, two fish spears; kitchen, one fish hook; store, one lead weight; and west palisade, two fish hooks.

### 3.1.10 Trap Parts

Four trap parts which included two trap springs and one complete and one partial base plate were found. The complete base plate is shown in Fig. 90 and measures 16 cm in length. Both trap springs are broken at the curve and are 18 cm and 16 cm long.

### 3.1.11 Distribution of Trap Parts

The complete base plate was found in the early blacksmith shop while the partial one was recovered in the store. The trap springs were found in the men's house and the factor's house.

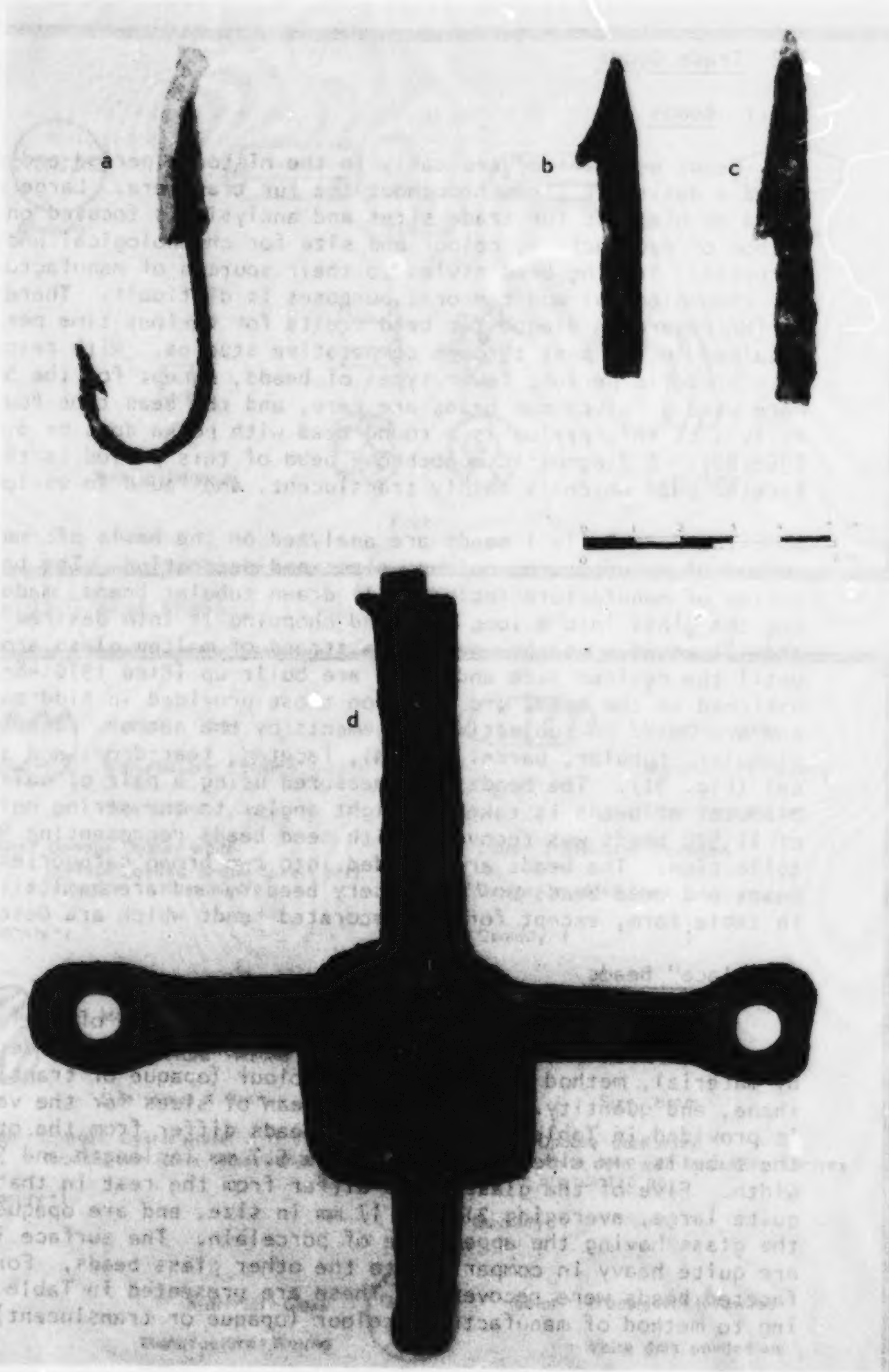


Figure 90. Fish hook with lead wrap, a; fish spears, b & c; trap part, d.

## 3.2 Trade Goods

### 3.2.1 Beads

Beads were introduced early in the historic period and continued to be a desirable item throughout the fur trade era. Large numbers are found on historic fur trade sites and analysis is focused on bead shape, method of manufacture, colour and size for chronological and temporal purposes. Tracing bead styles to their sources of manufacture in Europe for chronological and temporal purposes is difficult. Therefore, information regarding diagnostic bead traits for various time period has been obtained in the past through comparative studies. With respect to the late historic period, fewer types of beads, except for the seed beads, were used. Polychrome beads are rare, and the bead type found at Fort Pelly 1 of this period is a round bead with polka dots or eyes (Quimby 1966:88). A diagnostic monochrome bead of this period is the multi-faceted bead which is mainly translucent, and found in various sizes.

The Fort Pelly 1 beads are analyzed on the basis of: material; method of manufacture; colour; size; and decoration. The basic categories of manufacture include: (1) drawn tubular beads, made by drawing the glass into a long tube and chopping it into desired sizes; and (2) wound, made by wrapping a strand of molten glass around a wire until the desired size and shape are built up (Kidd 1970:48-50). Colours assigned to the beads are based on those provided in Kidd and Kidd (1970) and are based on subjective judgements by the author. Shapes include globular, tubular, barrel or oval, faceted, tear-drop, and subcylindrical (Fig. 91). The beads were measured using a pair of calipers and the diameter of beads is taken at right angles to the string hole. A total of 11,520 beads was recovered with seed beads representing 98% of the collection. The beads are divided into two broad categories, "necklace" beads and seed beads or "embroidery beads", and are basically dealt with in table form, except for the decorated beads which are described.

#### "Necklace" Beads

A total of 248 "necklace" beads which are made of various materials was recovered. Table 28 presents a breakdown of the non-decorated beads by material, method of manufacture, colour (opaque or translucent), shape, and quantity. The range and mean of sizes for the various shapes is provided in Table 29. Ten drawn beads differ from the others in that the tube is six sided. These average 5.7 mm in length and 5.4 mm in width. Five of the glass beads differ from the rest in that they are quite large, averaging 21 mm x 17 mm in size, and are opaque white with the glass having the appearance of porcelain. The surface is dull. They are quite heavy in comparison to the other glass beads. Forty-seven faceted beads were recovered. These are presented in Table 28, according to method of manufacture, colour (opaque or translucent) and quantity.

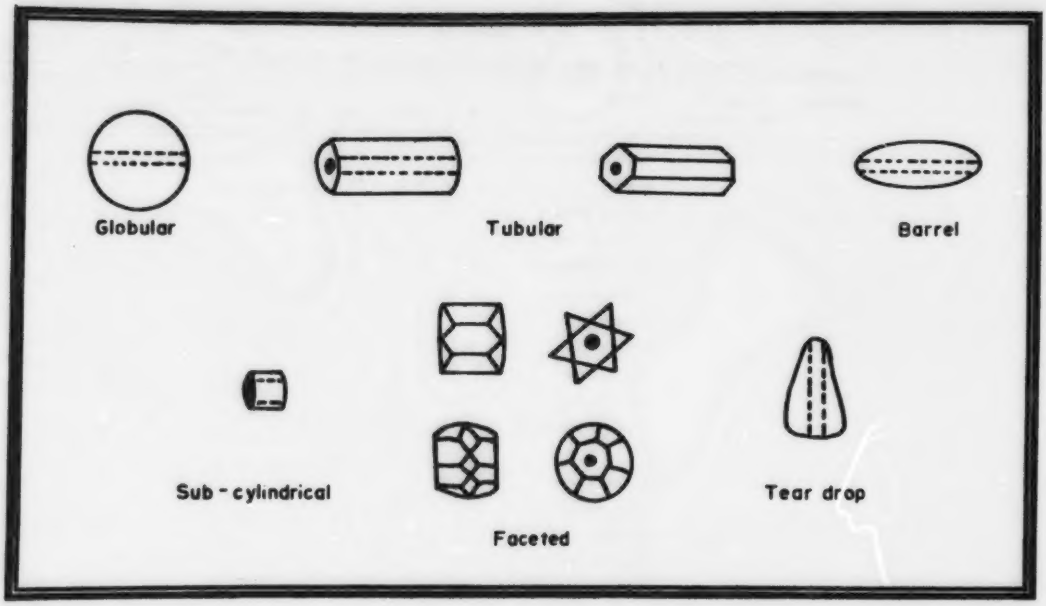
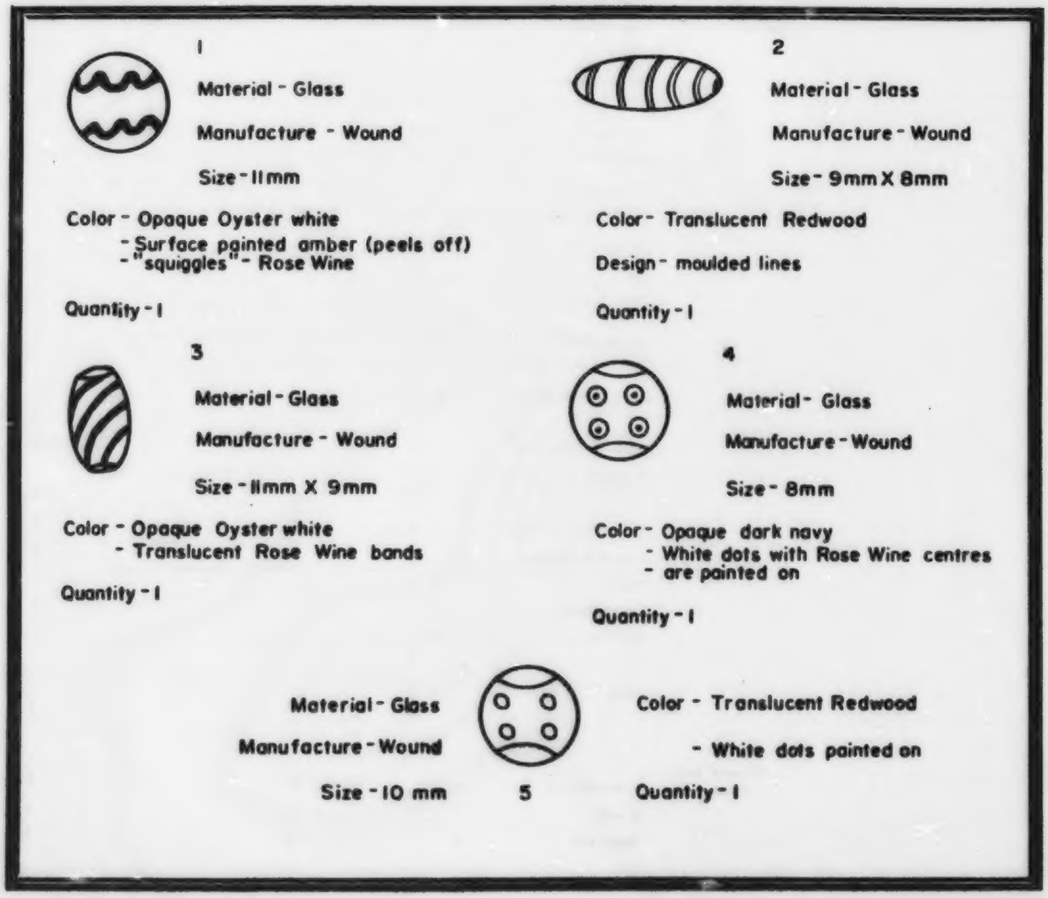


Figure 91. Bead Shapes.



1

Material - Glass

Manufacture - Wound

Size - 11mm

Color - Opaque Oyster white
- Surface painted amber (peels off)
- "squiggles" - Rose Wine

Quantity - 1

2

Material - Glass

Manufacture - Wound

Size - 9mm X 8mm

Color - Translucent Redwood

Design - moulded lines

Quantity - 1

3

Material - Glass

Manufacture - Wound

Size - 11mm X 9mm

Color - Opaque Oyster white
- Translucent Rose Wine bands

Quantity - 1

4

Material - Glass

Manufacture - Wound

Size - 8mm

Color - Opaque dark navy
- White dots with Rose Wine centres
- are painted on

Quantity - 1

5

Material - Glass

Manufacture - Wound

Size - 10 mm

Color - Translucent Redwood
- White dots painted on

Quantity - 1

Figure 92. Decorated Beads.

TABLE 28

Morphological and Quantitative Description of Non-Decorated Beads

| Material | Method of Manufacture | Colour | Shape | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | T | O | Glob. | Tub. | Bar. | Fac. | Tr-dr. | Sub-cyl. | |
| Glass | Drawn | Transparent | x | | | 2 | | | | | 2 |
| | | Black | | x | 1 | 5 | | | | | 6 |
| | | Oyster White | | x | | 4 | 3 | | | | 7 |
| | | Ultramarine | x | | 1 | 7 | | | | | 8 |
| | | Brite Navy | x | | 1 | | | | | | 1 |
| | | Light Gold | | x | | | 2 | | | | 2 |
| | | Turquoise | x | | 7 | | | | | | 7 |
| | | Rose Wine | x | | 2 | | | | | | 2 |
| | | Apple Green | | x | 1 | | 2 | | 1 | | 4 |
| | | Surf Green | x | | 1 | 1 | | | | | 2 |
| | | Light Aqua Blue | | x | | | 2 | | | | 2 |
| | | | x | | | 3 | | | | | 3 |
| | | Light Ivory | | x | 1 | | | | | | 1 |
| | | Dark Shadow Blue | x | | | 3 | | | | | 3 |
| | | Redwood | x | | | | 3 | | | | 3 |
| | | Teal Green | x | | 1 | | | | | | 1 |
| | | Aqua | x | | 1 | | 1 | | | | 2 |
| | | Mustard Tan | | x | | 1 | | | | | 1 |
| | | | x | | | 1 | | | | | 1 |
| | | Dark Palm Green | x | | | 1 | | | | | 1 |
| | Wound | Transparent | x | | 21 | | | | | | 21 |
| | | Black | | x | 3 | | 1 | | | | 4 |
| | | Oyster White | | x | 7 | 5 | 11 | | | | 18 |
| | | | x | | 7 | | | | | | 7 |
| | | Amethyst | | x | 2 | | | | | | 2 |
| | | Amber | | x | 1 | | | | | | 1 |
| | | Ultramarine | | x | 2 | | | | | | 2 |
| | | Light Gold | | x | 2 | | 4 | | | | 6 |
| | | Turquoise | | x | 1 | | 1 | | | | 2 |
| | | | x | | 6 | | | | | | 6 |
| | | Rose Wine | | x | | | 1 | | | | 1 |
| | | | x | | 1 | | | | | | 1 |
| | | Apple Green | | x | 4 | | 1 | | | | 5 |
| | | | x | | 3 | | | | | | 3 |
| | | Light Aqua Blue | | x | 2 | | | | | | 2 |
| | | | x | | | 1 | | | | | 1 |
| | | Dark Shadow Blue | x | | 23 | | | | | | 23 |
| | | Redwood | | x | | | 1 | | | | 1 |
| | | | x | | 1 | | 1 | | | | 2 |
| | | Brite Copan Blue | | x | 3 | | 2 | | | | 5 |
| | | Emerald Green | x | | 1 | | | | | | 1 |
| | | Maple | | x | 1 | | | | | | 1 |
| | | Brite Blue | | x | 1 | | | | | | 1 |
| | | Dark Navy | | x | 1 | | | | | | 1 |
| | | | x | | 1 | | | | | | 1 |
| | | Dark Palm Green | | x | 1 | | | | | | 1 |
| | | | x | | 9 | | | | | | 9 |
| | drawn Ground Surface | Transparent | x | | | | 6 | | | | 6 |
| | | Black | x | | | | 1 | | | | 1 |
| | | Amethyst | x | | | | 3 | | | | 3 |

| Material | Method of Manufacture | Colour | T | O | Glob. | Tub. | Bar. | Fac. | Tr-dr. | Sub-cyl. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Amber | x | | | | 4 | | | | 4 |
| | | Turquoise | x | | | | | 1 | | | 1 |
| | | Rose Wine | x | | | | | 2 | | | 2 |
| | | Apple Green | x | | | | | 1 | | | 1 |
| | | Shadow Blue | x | | | | | 5 | | | 5 |
| | | | | x | | | | 1 | | | 1 |
| | | Dark Shadow Blue | x | | | | | 3 | | | 3 |
| | | Emerald Green | x | | | | | 1 | | | 1 |
| | | Teal Green | x | | | | | 3 | | | 3 |
| | wound | | | | | | | | | | |
| | Pressed Surface | Transparent | x | | | | | 4 | | | 4 |
| | | Shadow Blue | x | | | | | 3 | | | 3 |
| | | Dark Shadow Blue | x | | | | | 6 | | | 6 |
| | | Brite Copan Blue | x | | | | | 1 | | | 1 |
| | | Teal Green | x | | | | | 1 | | | 1 |
| | | Light Cherry Rose | x | | | | | 1 | | | 1 |
| Shell | | White | | | | | 2 | | | | 2 |
| Bone | | | | | | 1 | | | | | 1 |
| Wood | | | | | | | | | 1 | | 1 |

T = translucent; O = Opaque; Glob. = Globular; Tub. = Tubular; Fac. = Faceted; Tr-dr. = Tear drop
Sub-cyl. = Sub-cylindrical

TABLE 29

Bead Sizes: Range and Mean

| Material | Shape | Range (mm) | Mean (mm) |
|---|---|---|---|
| Glass | Globular | 4-16 (l) x 5-17 (w) | 10 (l) x 11.5 (w) |
| | Tubular | 4-13 (l) x 2-7 (w) | 8.5 (l) x 4.5 (w) |
| | Barrel | 5-23 (l) x 4-17 (w) | 14 (l) x 10.5 (w) |
| | Faceted | 5-16 (l) x 5-16 (w) | 10.5 (l) x 10.5 (w) |
| | Tear-drop | 9 (l) x 6 (w) | 9 (l) x 6 (w) |
| Shell | Barrel | 6-9 (l) x 4-5 (w) | 7.5 (l) x 4.5 (w) |
| Bone | Tubular | 35 (l) x 13 (w) | 35 (l) x 13 (w) |
| Wood | Sub-cylindrical | 7 (l) x 13 (w) | 7 (l) x 13 (w) |

l = length
w = width

### Decorated Beads

Five decorated beads were found. These are illustrated and described in Fig. 92.

### Seed Beads: "Embroidery Beads"

A total of 11,272 seed beads are analyzed on the basis of colour and size. Measurements were obtained by putting the beads through a series of graded sieves. Table 30 lists the colours and sizes of the seed beads. A large number of these beads were found on the warehouse floor in a pattern (Fig. 93), suggestint that an embroidered item had decayed with the beads remaining in the original pattern sewn.

## 3.2.2 Distribution of Beads

### Palisades

Few beads (6 "necklace" and 31 seed beads) were recovered in the early palisade. The decorated bead, design #3, was found here. A relatively small number of beads were recovered from the later palisade. A total of 46 "necklace" beads, including the decorated bead, (design #5) in the east palisade, and one shell bead in the west palisade, was recovered from the later palisades. A variety of shapes and colours were present. No one colour or shape of bead predominates. Seventy-seven seed beads were found in a number of colours scattered throughout the north, east and west palisades.

### Stable

One barrel-shaped bright copan blue bead and two seed beads, oyster white and shadow blue in colour, represent the total number of beads found in this structure.

### Early Blacksmith Shop

Eight "necklace" beads and 25 seed beads were found in this structure. The "necklace" beads were found in a number of shapes, and variety of colours.

### Men's House

Five "necklace" beads, in three shapes, globular (2), tubular (2), and barrel (1), and one seed bead were all that were recovered from this feature.

### Store

The large number (24 "necklace" and 4,767 seed beads) of beads

## TABLE 30

### Seed Beads: Colour and Sizes

| Colour | 1 mm | 2 mm | 3mm | 4 mm | Total |
|---|---|---|---|---|---|
| Transparent | | 286 | | | 268 |
| Black | | 110 | 10 | 4 | 124 |
| Oyster White | | 3493 | 268 | 28 | 3789 |
| Amethyst | | 1 | | | 1 |
| Light Gold | | 18 | 1 | | 19 |
| Turquoise | | 8 | | | 8 |
| Rose Wine | | 1006 | 21 | 3 | 1030 |
| Apple Green | | 313 | 1 | | 314 |
| Surf Green | | 9 | | | 9 |
| Light Aqua Blue | | 85 | 6 | | 91 |
| Shadow Blue | | 1675 | 86 | 35 | 1796 |
| Dark Shadow Blue | | 237 | 3 | 10 | 250 |
| Redwood | | 927 | 89 | 44 | 1050 |
| Emerald Green | | 43 | | | 43 |
| Teal Green | | 243 | | | 243 |
| Light Cherry Rose | | 174 | | | 174 |
| Mustard Tan | | 55 | 1 | | 56 |
| Cinnamon | | 1367 | | | 1367 |
| Dark Navy | | 103 | | 2 | 105 |
| Dark Palm Green | | 196 | 10 | 2 | 208 |
| Lemon Yellow | | 199 | 1 | | 200 |
| Robin's Egg Blue | | 113 | 2 | | 115 |
| TOTAL | | 10,643 | 500 | 129 | |

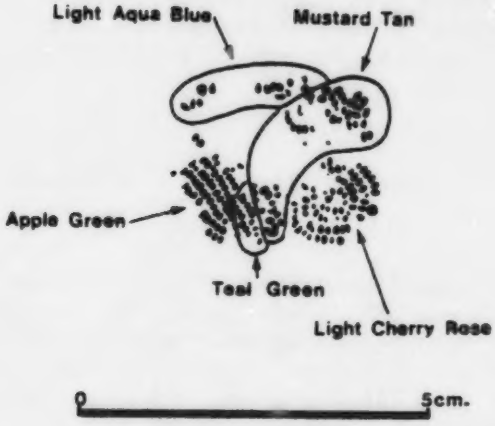

Light Aqua Blue
Mustard Tan
Apple Green
Teal Green
Light Cherry Rose
0
5cm.

Figure 93. Bead pattern found in warehouse.

found in the store is second only to the warehouse. In this feature, the largest number of beads was recovered from the cellar. Twenty "necklace" beads, including one ceramic-like bead, were present in three shapes, globular, barrel and faceted in a number of colours. No one shape or colour predominated. The largest number of seed beads (4733) occurring in one location was recovered from the cellar. Nineteen different colours were present, with the white being the most numerous (1294). Other colours which appeared in large quantities included: transparent (207), rose wine (340), shadow blue (1112), redwood (327), teal green (241), cinnamon (734) and dark palm green (102). The remaining beads were distributed throughout the hearth (2 "necklace" and 26 seed beads) and foundation (2 "necklace" and 8 seed beads).

## Warehouse

The largest number of beads (93 "necklace" and 5145 seed beads) was recovered from the warehouse. The largest concentration of beads occurred in the north cellar. Forty "necklace" beads, in three shapes, globular (27), barrel (5), and faceted (8), and in a variety of colours (transparent being the most common) were present. A total of 1522 seed beads was found, the majority belonging to the patterned design which was uncovered.

Beads were found scattered throughout the foundations as follows: east foundation, 14 "necklace" beads and 18 seed beads; west foundation, 31 "necklace" beads including the decorated bead (design #2), and 2360 seed beads. The "necklace" beads were found in a number of shapes, globular (16), tubular (5), barrel (11), faceted (12), and colours, with no one colour predominating. Seed beads were found in 17 different colours, with the most popular being white (920). Other colours found in large quantities included: rose wine (120); shadow blue (224); redwood (340); light cherry rose (174); and cinnamon (185).

In the hearth area, only six "necklace" beads, including the decorated bead (design #1) were found. However, 1234 seed beads were recovered. These were present in 14 different colours with the most common being: white (619); rose wine (111); and apple green (105).

## Kitchen

A total of 22 "necklace" beads and 847 seed beads was found in the kitchen. The "necklace" beads were present in four shapes, globular (14), tubular (3), barrel (2) and faceted (3) and in a number of colours with no one colour predominating. The seed beads were present in 16 different colours, the most common being: white (248), rose wine (147), shadow blue (207) and redwood (116).

## Factor's House

In comparison to the kitchen, store and warehouse, relatively few (3 "necklace" and 133 seed beads) were found in the factor's house.

However, the greatest variety of materials were represented. In addition to the glass beads, one bone and one wooden bead were found. The glass "necklace" beads were present in four shapes, globular (9), tubular (1), barrel (3), and faceted (4), and in a number of colours with no one colour predominating. Also, the decorated bead (design #4) was found in this feature. The seed beads were found in only four colours which included: shadow blue (54), redwood (76), dark palm green (2) and lemon yellow (1).

North Cellar

A total of three beads, one globular, one barrel and one faceted, in colours of white, redwood and cinnamon was found in this feature.

### 3.2.3 Metal Trade Points

Twelve metal trade points, nine complete and three fragmentary, made of ferrous metal were excavated. Points could be manufactured by Indians and traders from sheet iron, barrel strapping or metal from kettles and other utensils and materials. Three point styles are observed. Basically all are triangular in shape with a straight stem. Differences occur at the shoulder, which is either straight (style #1), bevelled (style #2), or tanged (style #3). Of the metal trade points found, five are of style #1, six are of style #2 and one is of style #3. The length and width at the shoulder are recorded for the points. The range for the style #1 points is 51 mm to 75 mm by 20 mm to 24 mm, with a mean of 59 mm by 21.6 mm, and for the style #2 points is 43 mm to 99 mm by 14 mm to 22 mm, with a mean of 61 mm by 18.8 mm. The one style #3 point measures 47 mm by 17 mm.

### 3.2.4 Distribution of Metal Trade Points

The styles #1 and #2 metal trade points were found in the warehouse (5), men's house (2), store (2), factor's house (1) and the west palisade. The style #3 metal point was recovered from the later east palisade.

### 3.2.5 Tinkling Cones

A total of 43 tinkling cones, 38 complete and 5 fragmentary, was found made of various materials in a number of sizes. These were made by rolling a sheet of metal into a conical form of varying sizes and regularity. Tinkling cones were musical ornaments that were sewn onto clothing and made a thinkling sound as the wearer moved around (Good 1972:87). The tinkling cones found are made of either yellow metal (21), ferrous metal (4) or white metal (17). They range in length from 14 mm to 60 mm, with a mean of 38.55 mm.

### 3.2.6 Distribution of Tinkling Cones

Equal numbers (7) of tinkling cones were found in the warehouse, factor's house and west palisade. The largest concentration (8) of tinkling cones, which were all manufactured of a yellow metal, was found in the North cellar.

# APPENDIX 4

# ARCHITECTURAL ARTIFACTS

Items in this functional group include those which would have been used in building construction. The analysis consists basically of quantitative and morphological descriptions of the artifacts with attributes and terms adopted from Priess (1971). Information regarding temporal or cultural affiliations is presented where possible.

## 4.1 Construction Hardware

### 4.1.1 Hasps

Six hasps, four made of yellow metal and one of ferrous metal were recovered. A hasp is a "strap or strap like device with an opening or loop at one end and which can be held in place with a pin or bar" (Priess 1971:118). If a loop is present, it is secured by a bar passing through it.

One hasp is quite elaborate in comparison with the others and consists of a strap of metal converging at one end and with a forged loop and pin at the other end. A rectangular loop projects from the surface at the converging end (Fig. 94). A strap wrapped around the pin to keep it in place and attached to the front and back is present. Two of the hasps of ferrous metal are crudely constructed from strips of metal, approximately 3.5 cm wide. One measures 11 cm in length and one end has been rolled to form a pivot eye 5.5 cm by 2.5 cm. The second strap has been split to form an eye, 5.3 cm by 2.5 cm, and the eye is formed by curving one end. The third hasp of ferrous metal consists of a wire folded in half and soldered together to form an eye, 7 cm by 2 cm. A small circular hole, 2.2 cm in diameter is present at the top. The fourth ferrous metal hasp consists of a strap 1 cm wide. It is 5 cm long and has an eye 3 cm long. It has been attached by a nail which is present but extremely corroded.

### 4.1.2 Hinges

Four complete hinges and one partially complete hinge were recovered along with 13 incomplete hinge fragments. All, except for two of yellow metal, are made of ferrous metal.

Two different shapes of hinges are present. The first consists

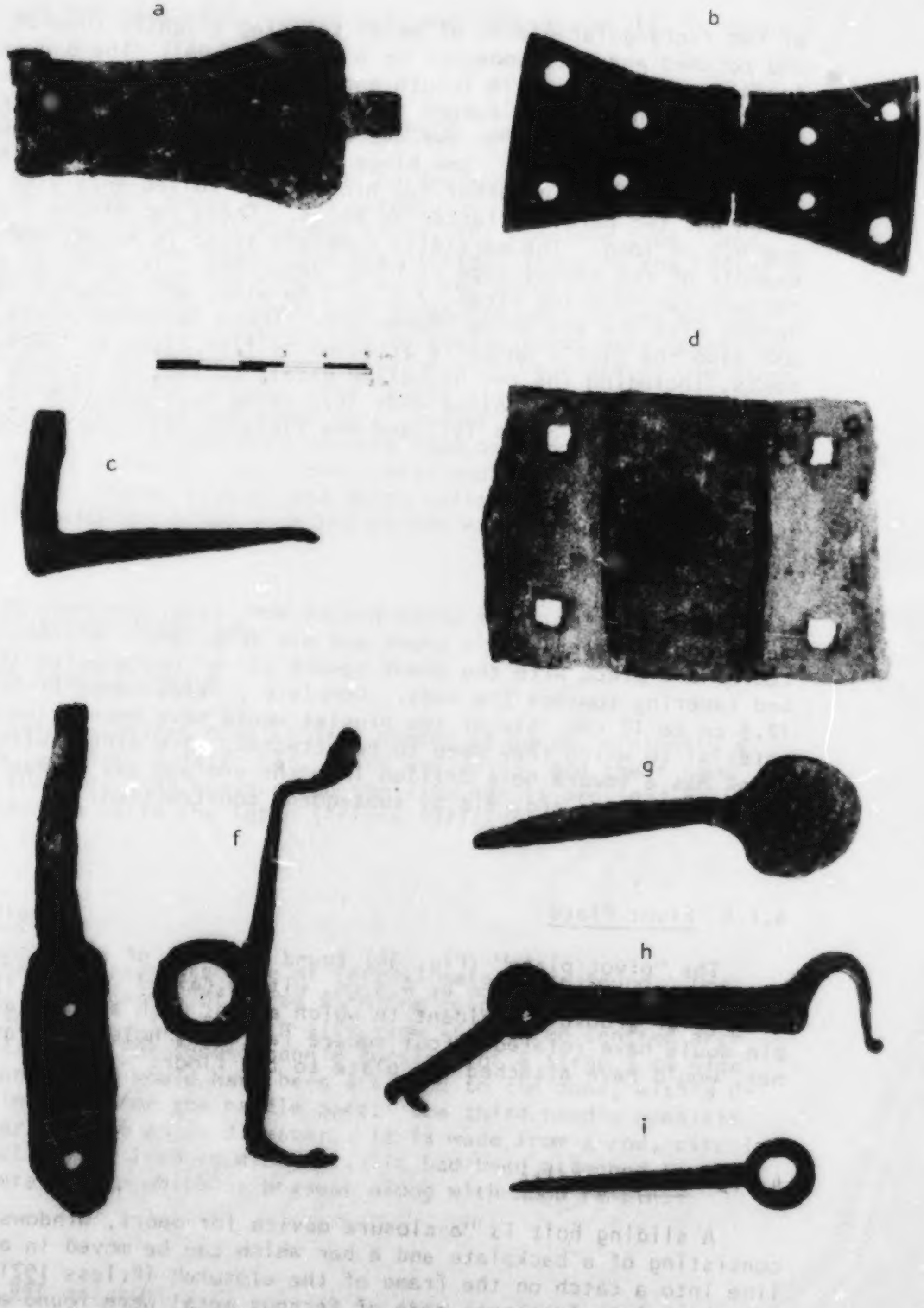


Figure 94. Hasp, a; hinge, b; pintle, c; "pivot plate", d; thumb latch closure handle, e; eye, f; lift bar, g; hook, h; eye, i.

of two rectangular pieces of metal tapering slightly towards the centre and notched and held together by a pin (Fig. 94). The one example found measures 9.5 cm in length and 5 cm in width at the ends and 3.5 cm at the centre. The second type of hinge consists of a strap with one end rolled to form an eye and a circular end finish. Three of this second type were found. One hinge has two square fastening holes and is 18.9 cm long. The other two hinges have rolled ends with a square notch and two parallel fastening holes. These two hinges are 6.5 cm and 4.5 cm long. The partially complete strap is an extremely large example of the second type of hinge described. It consists of a single rectangular tapering strap, 7.5 to 5 cm wide, and measures 44 cm in length with the end being broken off. Three fastening holes are present and also the pintle which is attached by five circular loops. The fragments, including the two of yellow metal, consist of various parts: rolled and partially rolled ends (6); strap sections with various numbers of fastening holes (5); and end finishes (2), one offset circle and one circular.

### 4.1.3 Pintles

Seven pintles, from which hinges were hung, are made of ferrous metal and L-shaped with a shank and pin (Fig. 94). All are constructed of one piece with the shank square (2) or rectangular (5) in shape and tapering towards the ends. Complete pintles range in length from 12.5 cm to 17 cm. Six of the pintles would have been driven into the material to which they were to be attached. One pintle with a square shank has a square hole drilled into the end and was probably set into its proper place and held by subsequent construction.

### 4.1.4 Pivot Plate

The "pivot plate" (Fig. 94) found consists of a rectangular piece of ferrous metal, 8.5 cm by 6.5 cm, with a raised central strip where a circular groove is evident in which a door with a circular bar or pin would have rotated. Four square fastening holes, one at each corner, would have attached the plate to the floor.

### 4.1.5 Sliding Bolts

A sliding bolt is "a closure device for doors, windows, etc., consisting of a backplate and a bar which can be moved in a straight line into a catch on the frame of the closure" (Priess 1971:261). Four backplate fragments made of ferrous metal were found and range in size from 3 cm to 7.2 cm in length by 1 cm to 1.7 cm in width. One to three fastening holes are present and staples for holding the bolt in place are round (1), square (2), and rectangular (1) in shape.

### 4.1.6 Distribution of Construction Hardware

The majority of the construction hardware was recovered in the kitchen, the factor's house and the warehouse. Items in the kitchen consisted largely of hinges; the big hinge, the complete type 1 and one type 2 hinges; three hasps; and one pintle. Items in the factor's house included: the hasp eye fragment with red paint; three hinge straps; one complete type 2 hinge; the hinge fragment of yellow metal; and one pintle. In the warehouse, the following items were found: one hinge fragment of yellow metal; one sliding bolt back plate; one hinge fragment; and the "pivot plate". The "pivot plate" was found in the north cellar. The remaining items were scattered throughout the following structures or areas, with no more than one or two occurring in one place: early palisade, later east, west and north palisades, early blacksmith shop, store, stable, and North cellar. In the later north palisade, the complete hinge with the pintle was found.

## 4.2 Door Closures/Fastenings

### 4.2.1 Thumb Latch Closures

Thumb latch closures consist of a number of parts, minimally a handle with lift bar, a latch bar, catch and guide, and their name comes from the fact that pressure on the lift bar is provided by the thumb in order to raise the latch (Priess 1971:298).

### 4.2.2 Handles

Three handle fragments made of ferrous metal were found. One handle (Fig. 94) consists of a rod with one cusp which has two circular fastening holes. Its form in side view is a three centred arch (Priess 1971:302). The second handle consists of a strap 3 cm wide and 16 mm long which would have been attached to the door, with a U-shaped rod inserted for the handle part. The third handle consists of a circular ring, 6 cm in diameter. It is made from a rod, circular in cross section and 1 cm in diameter. It had been attached to the door by a metal strip which is present along with wood remains.

### 4.2.3 Lift Bar

One lift bar (Fig. 94), which represents the bar passing through the handle and emerging immediately below the latch bar (Priess 1971: 296) was recovered. It is made of ferrous metal and has a curved shank with a spatulate thumb press. It is 9 cm long.

### 4.2.4 Latch Bar Catches

Five latch bar catches, one complete and four fragments were found. These are attached to the door on the same side as the latch bar and provide a notch for the latch bar to fall into (Priess 1971:296). The four fragments are made entirely of ferrous metal and the one notch present would hold a latch bar 2 cm wide. The fifth latch bar catch, which is complete has the plate made of yellow metal and the notch of ferrous metal. The yellow metal plate was rectangular in shape, 6 cm by 2.7 cm, with two fastening holes and the notch extends 2.6 cm from the plate and would hole a latch bar 1 cm wide.

### 4.2.5 Latch Bar Lock

One latch bar lock fragment which is "attached above the latch bar and can be moved into a position to prevent the latch bar from being lifted" (Priess 1971:296) was found. The shank is rectangular in cross section and does not taper. The pivot is oval in shape.

### 4.2.6 Distribution

The majority of the thumb latch closure parts were found in the early blacksmith shop. These included: the handle; the lift bar; and the latch bar lock. The remaining items were distributed as follows: factor's house, one bar catch; North cellar, one complete latch bar catch made of yellow and ferrous metal; store, two latch bar catches; and west palisade, one latch bar catch. The ring-shaped handle was also found in the store.

### 4.2.7 Hooks and Eyes

A variety of shapes and sizes of hooks and eyes made of ferrous metal were employed to fasten doors, gates, etc. A total of 13 hooks and 20 eyes were found. The hook attributes are presented in Table 31. Of the 20 eyes found, five are complete and represent two different types. Four consist of a circular eye made of one piece of ferrous metal, rectangular in cross section with a tapering shank which was driven into the wood (Fig. 94). They range in length from 6.2 cm to 7.2 cm. The fifth eye differs substantially from the above. It is

## TABLE 31

## HOOK ATTRIBUTES

| General Form | C-S Shank | Eye | Hook | Length (cm) | Comments |
|---|---|---|---|---|---|
| Rising hook | rectangular | square at end with hole | curved inward | 13 | crudely fashioned from some other article |
| Rising hook | circular | - | curved outward | - | |
| Rising hook | square | bent and soldered | curved outward | - | |
| Rising hook | square | bent and butted | - | - | |
| Rising hook | circular | - | curved inward | - | |
| Rising hook | rectangular | bent and forged is centred- a wire passes through eye | curved outward | 9 | (Figure 94) |
| Rising hook | round | - | curved inward | - | |
| Flat hook | square-twisted | bent-butted | curved inward | 22 | |
| Flat hook | circular | bent and butted - is above midline of shank | curved inward | 12.5 | |
| Flat hook | circular | bent and butted - is below midline of shank | curved inward | - | |
| Flat hook | circular | bent and butted - is above midline of shank | curved inward | 4.5 | |
| Flat hook | circular | bent - not completely butted - is above midline of shank | curved inward | 11 | |
| Flat hook | circular | - | curved inward | - | |

fashioned by twisting a scrap of metal, 1 cm wide, in the centre to form a loop or eye and bending the ends to form attachments (Fig. 94). Two screws would have been used to fasten it to the door. It is 10 cm long. The remaining eye fragments are made of ferrous metal, rectangular or round in cross section, and the eyes are all circular except for one which is oval.

### 4.2.8 Distribution of Hooks and Eyes

The largest number of hooks and eyes were concentrated in the following three structures: warehouse, which included two complete eyes, two eye fragments, two hooks and one door handle; kitchen, which included one complete eye and five hooks; early blacksmith shop, which included eight eye fragments and one hook. The remainder were distributed throughout the store, the men's house, the factor's house and the later east and west palisades.

## 4.3 Door Lock Parts and Door Accessories

### 4.3.1 Door Lock Plates

Three heart-shaped main plates, probably of a plate stock lock, were found at Fort Pelly 1. The first plate (Fig. 95) is made of a ferrous metal and measures 9 cm in length and width and would have been attached to the door by four rivets. The keyhole slot has straight, diverging sides with a concave end. On the front of the plate a metal keyhole cover which swung back and forth to reveal the keyhole is present. An incomplete lock bolt and remains of the cover plate are evident. The second lock plate is made of ferrous metal and measures 8 cm in length by 7.5 cm in width and has one rivet present. A complete lock bolt is also present. The third measures 10 cm in length by 6 cm in width with no other parts present and is extremely corroded.

### 4.3.2 Cover Plate

Two cover plates which serve to cover part or all of the lock mechanism (Priess 1971:28) were recovered. One consists of a fragment made of ferrous metal and has two slots and the keyhole present. The second cover plate is more complete and also made of ferrous metal. It is roughly rectangular in shape with a concave bottom and measures 7 cm in length by 5.5 cm in width. Two fastening holes and the keyhole are evident.

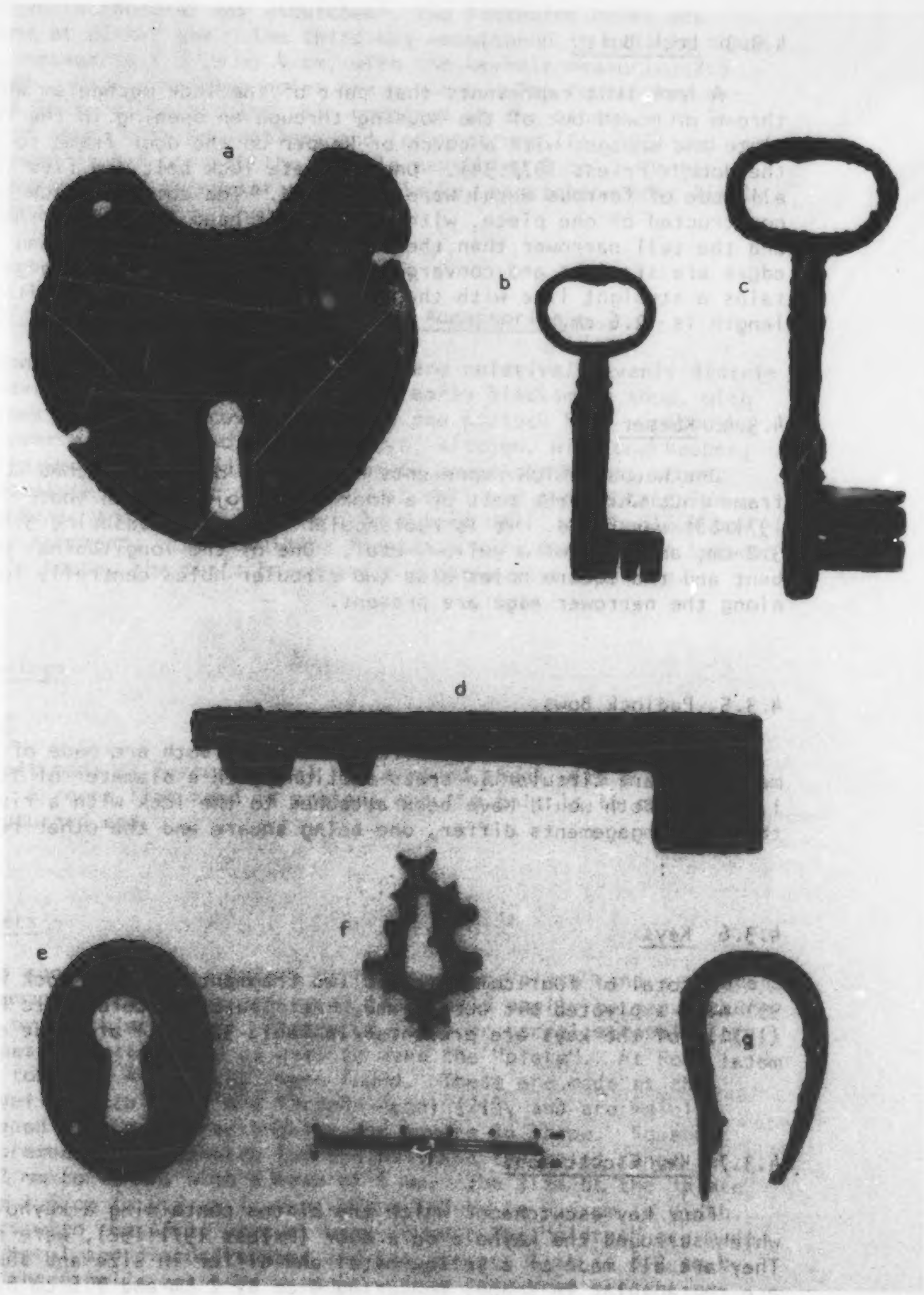


Figure 95. Door lock plate, a; ward keys, b & c; lock bolt, d; key escutcheons, e & f; staple, g.

### 4.3.3 Lock Bolts

A lock bolt represents that part of the lock mechanism which "is thrown or moved out of the housing through an opening in the front plate and engages with a catch or keeper on the door frame to secure the door" (Priess 1971:34). One complete lock bolt and five fragments, all made of ferrous metal were recovered. The complete lock bolt is constructed of one piece, with a dead bolt head located to the left, and the tail narrower than the head. In shape, the upper and lower edges are straight and converge from the head. The upper edge maintains a straight line with the top of the head (Fig. 95). Its total length is 12.6 cm.

### 4.3.4 Keeper

One keeper which represents "the plate or box attached to the door frame into which the bolt of a door lock projects when shot" (Priess 1971:88) was found. It is rectangular in shape, measuring 5.5 cm by 3.2 cm, and made of a yellow metal. One of the longitudinal edges is bent and two square holes plus two circular holes centrally located along the narrower edge are present.

### 4.3.5 Padlock Bows

Two bows from padlocks were recovered. Both are made of ferrous metal and are circular in cross section, with a diameter of 1.2 cm and 1.34 cm. Both would have been attached to the lock with a rivet, but the bolt engagements differ, one being square and the other rectangular.

### 4.3.6 Keys

A total of four complete and two fragments of ward lock keys (Fig. 95) with a pivoted bit were found. Attributes, according to Priess (1971), of the keys are presented in Table 32. All are made of ferrous metal.

### 4.3.7 Key Escutcheons

Four key escutcheons which are plates containing a keyhole and which surround the keyhole on a door (Priess 1971:192), were recovered. They are all made of a yellow metal and differ in size and shape. Two are rectangular in shape, measuring 4 cm by 2 cm and 7.6 cm by 1.4 cm, with a keyhole opening being 3.7 cm and 1.8 cm in length respectively.

On the larger rectangular key escutcheon, two fastening holes are present, one at either end. The third key escutcheon is oval in shape (Fig. 95), measuring 5.5 cm by 4 cm, with the keyhole measuring 2.5 cm in length. Four fastening holes are present. The fourth key escutcheon is quite elaborate and thin compared to the others. It is irregular in shape with projections and indentations (Fig. 95) and its overall length is 4.2 cm with the keyhole measuring 2 cm in length. By its appearance and irregular shape, this key escutcheon most likely belonged to a chest rather than a door.

### 4.3.8 Distribution of Door Lock Parts and Accessories

The door lock parts and accessories were relatively evenly distributed between five structures as follows: early blacksmith shop, with two main lock plates, one cover plate and one padlock bow; warehouse, with one cover plate and two complete keys; kitchen, with one keeper, one complete key and the oval and elaborate key escutcheons; store, with one complete lock bolt, one lock bolt tail and two rectangular key escutcheons; and stable, with one lock bolt tail, one padlock bow and one key fragment. The remaining fragments were distributed between the factor's house, the men's house and the early west palisade.

## 4.4 Fastenings

### 4.4.1 Bolt

One bolt made of ferrous metal has a round shank with a diameter of 1.4 cm. A round flat head is present and the bolt is 16 cm long with one upturned end.

### 4.4.2 Rivets

Rivets consisting of a square or rectangular "plate" and a square nail are common on fur trade posts, as they could easily be manufactured on site by the blacksmith. Pieces of scrap or barrel strapping of various types of metal could be used to make the "plate". At Fort Pelly 1, a total of 44 "plates" were found. These are made at the post from yellow metal (23) and ferrous metal (21), and are mainly diamond-shaped with a few rectangular and square in shape. Square holes are present in the centre for the nail and the holes range in size from 2 mm to 19 mm, with a mean of 6 mm. The size of the "plate" ranges from 1.5 cm to 6.3 cm in length and 1.2 cm to 5.5 cm in width. Three rivets with the nails present were found. The "plates" are made of ferrous metal and diamond-shaped and the average size is 8.2 cm by 2 cm. The three nails are hand wrought with a rose head present on two of the nails. The nails measure between 2 cm to 3.2 cm in length.

### 4.4.3 Washers

A total of 25 washers made of either ferrous metal (8), yellow metal (15), or gray metal (2) were found. All, except for the two of gray metal, are manufactured at the post from metal scraps. These are roughly circular and range from 10 mm to 38 mm in diameter, with a mean of 19.2 mm. A circular hole 3 mm to 9 mm in diameter is present in the centre. The two washers of gray metal are factory-produced and measure 21 mm and 24 mm with circular holes of 4 mm.

### 4.4.4 Staples

Fifteen U-shaped staples were found at Fort Pelly 1. They are all made of ferrous metal and had a general round shape (Fig. 95), except for one which is square. The arms are rectangular or square in cross section and tapered towards the ends and would have been driven into the wood. The shanks are either square, round or rectangular in cross section. The staples range in size from 3.5 cm to 11.5 cm by 2 cm to 6.5 cm.

### 4.4.5 Distribution of Fastenings

The fastening hardware was distributed throughout a number of features with the largest number (20) occurring in the warehouse. Items found here were concentrated in the north cellar which included: four yellow metal rivet plates; one washer of yellow metal and two washers made of a gray metal. The remaining items in the warehouse were scattered throughout the foundations. The remainder of the fastening hardware was distributed throughout the post in the following features: the early east palisade; the later north, east and west palisades; the early blacksmith shop; the store; the kitchen; the factor's house; and the North cellar.

## 4.5 Nails

Nails found at Fort Pelly 1 include both hand wrought and machine stamped ones and represent the largest group of artifacts in the architectural group. Hand wrought nails were used throughout the 17th and 18th centuries and continued into the early decades of the 19th century because of their strength especially for clinching (Nelson 1968). In more isolated areas, where machine stamped nails were not as readily available, hand wrought nails continued in use as late as the mid 19th century (Dove 1971).

Hand wrought nails can be distinguished from the machine stamped nails by the following characteristics: hand wrought nails taper on all four sides of the shank toward the point, rather than on opposite sides as is the case in machine stamped nails; hand wrought nails vary in thickness throughout the length of the shank, whereas the machine stamped nails are of uniform thickness throughout; and there are no striations or parallel sheer marks, resulting from the cutting blades used to make machine stamped nails, on the shanks of hand wrought nails (Dove 1971).

In the period from 1790 to 1830, machine stamped nails were invented and improved upon. By the early 19th century, machine stamped nails were being manufactured on a wide scale in the eastern United States (Nelson 1968). The use of these early dates for machine stamped nails must be viewed with caution when applying them to fur trade posts in western Canada. Taking into account factors of location, availability, and HBC policy, the later dates, ca. 1830s, would appear more probable.

A total of 5457 nails were recovered at Fort Pelly 1. These are analyzed on the basis of manufacture, head type and size, and the data is presented in Table 33.

### 4.5.1 Distribution of Nails

Information regarding the distribution of nails was limited because of the following factors: only the first 1000 nails were given a catalogue number; the remaining nails were not given catalogue numbers but were saved; and the nails without the catalogue numbers had been previously sorted into categories by head type and, therefore, locational data could not be discerned. A number of observations, however, were noted from the distribution of the catalogued nails. These were: the largest number (433) of nails were recovered from the factor's house, however, this should be viewed with discretion considering only one fifth of the nails were represented; the majority of nails found in the factor's house, warehouse, store, early blacksmith shop and stable were one to four inches in length; the largest number of machine stamped nails were present in the factor's house; and the rose head was the most common head type found on the nails.

## 4.6 Tacks

A total of 27 tacks were found. These are made of either a yellow metal or ferrous metal. Manufacturing methods include both hand wrought and machine stamped ones. Three tacks are manufactured by rolling a piece of yellow metal into a tight cone and attaching a head. These were probably quickly made by the blacksmith at the post. The tacks are analyzed according to material, method of manufacture, head type and

TABLE 33

Breakdown of Nails by Method of Manufacture, Head Type and Size

| Manufacture<br>Size (in)<br>Head Type | Hand Wrought | | | | | | | | | | | | Machine Cut | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ±1 | ±2 | ±3 | ±4 | ±5 | ±6 | ±7 | ±8 | ±9 | ±10 | U* | Total | ±1 | ±2 | ±3 | ±4 | ±5 | ±6 | ±7 | ±8 | ±9 | ±10 | U | Total |
| Rose Head | 357 | 532 | 492 | 69 | 11 | 3 | 4 | | | | 382 | 1850 | 200 | 247 | 155 | 22 | 7 | 3 | 1 | | 1 | | 92 | 728 |
| Clasp Head | 13 | 237 | 227 | 4 | 2 | 2 | | | | | 186 | 671 | 24 | 165 | 85 | | | | 1 | | | | 53 | 328 |
| Square Head | 10 | 20 | 31 | 11 | 3 | 2 | | | | 1 | 33 | 111 | 25 | 8 | 6 | 5 | | | | | | | 12 | 56 |
| Platform Head | 15 | 60 | 66 | 6 | 5 | | | | | | 31 | 183 | 16 | 28 | 20 | 10 | | 1 | | | | | 16 | 91 |
| Die Head | | 1 | 10 | 3 | 3 | | | | | | 11 | 28 | | 1 | 1 | 3 | | | | | | | 2 | 7 |
| L-Shaped | 1 | | | | | | | | | | | 1 | 1 | | | | | | | | | | | 1 |
| T-Shaped | | | | | | | | | | | | | | | | | | | | | | | | |
| Brad | 1 | 7 | 8 | 2 | | | | | | | 4 | 22 | | | 5 | 1 | | | | | | | 1 | 7 |
| Round Head | 40 | 6 | | | | | | | | | | 46 | 50 | 3 | | | | | | | | | | 53 |
| Horse Shoe | 6 | 2 | | | | | | | | | 2 | 10 | | 1 | | | | | | | | | | 1 |
| Not identifiable | 52 | 44 | 31 | 5 | | 2 | 1 | | | | 813 | 948 | 20 | 23 | 5 | 8 | | | | | | | 259 | 315 |
| TOTAL | 495 | 909 | 865 | 100 | 24 | 9 | 5 | | | 1 | 1462 | 3870 | 336 | 476 | 277 | 49 | 7 | 4 | 2 | | 1 | | 435 | 1587 |

*Unknown

shape and the data is presented in Table 34. Red paint was present on four of the ferrous tacks.

### 4.6.1 Distribution of Tacks

The largest number of tacks was found in the store (6) and the warehouse (5), with no one type or material predominating. The rest were distributed throughout the early and later palisades, the kitchen, the store, and the early blacksmith shop.

## 4.7 Window Glass

The window glass fragments at Fort Pelly 1 were found in five thicknesses. These are as follows: 1 mm (375); 1.5 mm (236); 2 mm (644); 2.5 mm (88); and 3 mm (10). An additional total of 232 extremely burnt window glass fragments were also recovered. Putty is present on one large and one small fragment of window glass found in the kitchen.

### 4.7.1 Distribution of Window Glass

The largest amount of window glass fragments were found scattered throughout the warehouse (520) and the store (577). No pattern could be determined in either case which might indicate the location of windows. Window glass fragments were also recovered in the factor's house (147), and the kitchen (46). The fragments in the kitchen were quite large in comparison to those found in other structures. The remaining fragments of window glass were scattered throughout the palisades.

TABLE 34

Breakdown of Tacks by Material, Method of Manufacture, Head Type and Size

| Manufacture | | Hand Wrought | | | | | | | | | | Machine Stamped | | | | Rolled Yellow Metal | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material | Head Type | SIZE | | | | | | | | | | SIZE | | | | SIZE | | |
| | | 3/8" | 1/2" | 3/4" | 7/8" | 1" | 11/4" | 11/2" | 21/8" | U* | TOTAL | 3/8" | 1" | U | TOTAL | 1" | U | TOTAL |
| Yellow Metal | Dome | | | | | | | | | | | 1 | | 4 | 5 | | | |
| | Round/Flat | | | | | 1 | | | | 1 | 2 | | 1 | | 1 | 1 | 2 | 3 |
| | Rose Head | | | | | | | | | | | | | | | | | |
| | Unidentifiable | | | | 1 | | | | | | 1 | | | | | | | |
| Ferrous Metal | Dome | | | | | | | | | | | | | | | | | |
| | Round/Flat | | | 2 | | 1 | 7 | 2 | 1 | | 13 | | | | | | | |
| | Rosehead | | 1 | | | | | | | | 1 | | | | | | | |
| | Unidentifiable | | | | | | | | | 1 | 1 | | | | | | | |

U = Unknown

# APPENDIX 5

# WORK ACTIVITIES, NATIVE AND MISCELLANEOUS ARTIFACTS

## 5.1 Work Activities

Artifacts in this functional group include those which would be employed in various work related activites, such as transport of goods, stable activities, gardening, etc. Analysis basically consists of quantitative and morphological descriptions of the artifacts with cultural and temporal affiliations provided where possible.

### 5.1.1 Binding Straps

A total of 23, 18 complete and 5 fragmentary, binding straps were found. These were wrapped around the logs to keep them from splitting. The binding straps are all made of ferrous metal and vary slightly in shape and form. The majority (19) are made of flat ferrous straps, which range in width from 2.5 cm to 3.5 cm, and in thickness from 1.6 mm to 2.3 mm. When folded around the wood, these took on a rectangular shape, and were secured by one of three methods: (1) the ends met and were riveted or nailed (1); (2) the ends overlapped and were riveted (2); and (3) the ends did not meet and were nailed (4) (Fig. 96). The complete binding straps range from 4 cm to 11.5 cm in length and from 6 cm to 9.5 cm in width. Four binding straps are fashioned from a rod, square in cross section, with a diameter of 7 mm. These are oval in shape with the ends knotted (Fig. 96) for security. These average 10 cm by 8 cm in size.

### 5.1.2 Distribution of Binding Straps

The largest number of binding straps (6) were recovered from the factor's residence, with an equal number (3) distributed in each of the following structures: the kitchen, the men's house, the North cellar, the store and the early blacksmith shop. One was found in the west palisade and one in Square 52L01. As previously noted (Chapter 4), logs in the cellar of the factor's house had binding straps on the ends, and hence a large number of these were recovered from this structure.

Figure 96. Binding straps, a & b; brush, c; cotter pin, d; metal fleshers, e & f.

### 5.1.3 Bone Tool Handles

Two cone-shaped bone handles and one preform used for chisels or gimlets were recovered. The completed handles measure 13 cm and 7 cm in length and have a hole centrally drilled for the insertion of the tool. The preform is lacking the drilled hole. The two complete bone handles were found in the men's house and the North cellar, while the preform was recovered from the southwest corner of the later palisade.

### 5.1.4 Brackets

Three brackets made of ferrous metal were found. Two consist of a rod, one square in cross section and the other round, shaped into the form of a U. The third varies slightly in that it is made from a ferrous strap, 13 cm long and 12 cm wide, with the edges folded down over the wood, which is still present. A slot is present along the top of the bracket. One U-shaped bracket was found in the store while the remaining two brackets were recovered from the west palisade.

### 5.1.5 Brush

Brush fragments found consist of a wooden back with evidence of the straw tufts still present, plus three fragments with the tufts of straw present. The complete wooden back, measures 15 cm by 5 cm and yellow metal wire is present on one side which attached the tufts to the brush (Fig. 96). The tufts consist merely of stubs. The complete wooden brush back was found in the kitchen while the three wooden fragments with the straw tufts were found in the factor's house.

### 5.1.6 Containers

Metal container fragments found consist of body fragments and circular or oval lid or bottom portions and are made of either gray metal (11) or ferrous metal (9). Circular fragments representing lids or bottoms range in diameter from 4.5 cm to 18 cm. The edges of two of the circular parts were turned under. A handle is present on one lid with an upturned edge and extends the diameter of the top which measures 15 cm. A large oval lid which measures 41 cm by 34 cm is made of a gray metal and has an indented section extending downward from the top. This would allow it to fit snuggly on the main container. A large oval handle is also present on the top.

### 5.1.7 Distribution of Containers

A large gray metal oval lid was found in the west palisade immediately east of the factor's residence, while the ferrous metal circular lid was recovered from the North cellar. The rest of the fragments were recovered from the early blacksmith shop (2), the kitchen (5), the factor's house (4), the warehouse (6) and the store (1).

### 5.1.8 Chinking

Seventeen pieces of chinking, composed of clay with small pebble inclusions were found. These are too fragmentary in nature for further analysis. The majority of the chinking fragments (11) were found in the warehouse, with the rest distributed in the store and the palisades.

### 5.1.9 Cotter Pins

A total of 5 cotter pins made of ferrous metal and ranging in length from 3 cm to 5 cm were found. Three are made of ferrous strips, rectangular in cross section (Fig. 96), while two, which are extremely crude, are manufactured of a ferrous rod circular in cross section. Two cotter pins, including one of the crudely manufactured ones, were found in the store, while the others were recovered from the warehouse (1), the factor's house (1) and the west palisade (1).

### 5.1.10 Fleshers

Fleshers made both of bone and ferrous metal were found at Fort Pelly 1. Of the bone fleshers, two complete and six fragments of various portions are present. The complete specimens measure 19 cm and 32.5 cm in length. The two ferrous metal scrapers differ slightly in shape. The first consists of a tang, 4.5 cm in length, for insertion into a handle and a rectangular base, 3.5 cm by 2 cm, with thirteen teeth (Fig. 96). The second specimen consists of a ferrous metal strip, 6.5 cm long which flares outward at one end to 7 cm in width, and represents the scraping end. No teeth are present (Fig. 96).

### 5.1.11 Distribution of Fleshers

The two complete bone fleshers were found in the men's house and the west palisade. The remaining bone flesher fragments were recovered from the factor's house (1), the kitchen (1), the warehouse (1), the east palisade (1) and the west palisade (1). The metal scraper with the teeth was retrieved from the warehouse, while the other was found in the factor's house.

### 5.1.12 Gardening Implements

#### Hoe Blades and Handle Attachments

A total of four hoe blades and one handle attachment made of ferrous metal was found. The one complete example had a rectangular blade, 18 cm by 13 cm, with a handle attachment which consists of an eye, tear drop in shape and 4.5 cm long, through which the wooden handle would be inserted and a triangular plate fastened to the blade by three rivets (Fig. 97). Three additional hoe blades were recovered, one rectangular in shape, measuring 18 cm by 16 cm, and the other two rectangular in shape with rounded tops. These two measure 17.5 cm by 13 cm and 15.5 cm by 13 cm. One handle attachment similar to the one described above was also found.

#### Scythes

Scythes are represented by one complete specimen and one blade fragment. Both are made of ferrous metal and the complete specimen is curved and measures 41 cm in length, with the handle portion 11 cm long and 4.5 cm wide.

#### Shovel Blades and Ferrules

Shovel blades found consist of one complete blade, without the handle attachment and one fragment. These are made of ferrous metal and the complete specimen is rectangular in shape and measures 32.5 cm by 22.5 cm. The shovel ferrule consists of two slightly concave ferrous metal straps, 17 cm by 3 cm, which would fit on either side of a round wooden handle, with two rivets present, which fasten the ferrule to the handle.

#### Handle Attachments

Four handle attachments which could be used for various implements were recovered. Three of these consist of a single ferrous metal strap, approximately 3.2 cm wide, and slightly curved to fit the wooden handle. No handle is complete, but the largest example measures 24 cm in length. Fastening holes are present on all three. The fourth handle attachment consists of a piece of gray metal, 3 cm wide, wrapped around a portion of the wooden handle which is present and is secured by a nail driven through the metal and the wood.

Figure 97. Hoe blade, a; spigot handle, b; harness bell fragment, c; snow shoe netting needle, d; pocket knife parts, e; strike-a-light, f; strap hook, g; cheek ring and curb, h.

### 5.1.13 Distribution of Gardening Implements

The gardening implements were mainly concentrated in the early blacksmith shop and the west palisade. Items in the blacksmith shop included: the complete hoe blade and a blade with a rounded top; the scythe blade fragment; and the shovel blade without the handle attachment; and one handle fragment. The remaining items were distributed throughout the following features: the men's house had one hoe handle attachment; the later blacksmith forge had one hoe blade with a rounded top; the North cellar had one shovel ferrule and the handle attachment of gray metal; the store had one ferrous metal handle attachment; the kitchen had one ferrous metal handle attachment.

### 5.1.14 Grommets

Five grommets, four made of a yellow metal and one of a gray metal were recovered. These range in diameter from 6 mm to 11 mm and would be found on various items from shoes to belts. The grommets were found in four areas: the store (2), the factor's house (1), the west palisade (1), and the north palisade (1).

### 5.1.15 Netting Needles

Eight bone snowshoe netting needle fragments were found at Fort Pelly 1. According to Rogers (1967:48), these were made from a thin piece of bone lenticular in outline with a hole at the centre and varied in length from approximately 5.7 cm to 11.25 cm and in width from 6 mm to 12 mm (Fig. 97). No complete specimens were found, but assuming the hole is centrally located, the specimens from Fort Pelly 1 would range in length from 10 cm to 12 cm, with the width at the centre of the needle ranging in size from 0.83 cm to 1.4 cm. One of the needles represents a preform which was never completed.

### 5.1.16 Distribution of Netting Needles

The netting needles were found in four features: the warehouse (1), the factor's house (2), the kitchen (3), including the preform, and the west palisade (2).

### 5.1.17 Paint and Vermilion

Fragments of nodules of dried green paint and vermilion, which is a bright red pigment, were found scattered throughout the post. While the sample is mainly represented by extremely small fragments, vermilion is present on two pieces of chinking and green paint is present on a fragment of wood.

### 5.1.18 Distribution of Paint and Vermilion

The two pieces of chinking with vermilion were recovered from the stable, while the piece painted green was found in the warehouse. The remaining fragments of green paint and vermilion were distributed throughout the post in the following features, with no one colour predominating in any one locale: the store, the kitchen, the factor's house, the warehouse, the later blacksmith area and the north palisade and its western extension.

### 5.1.19 Pocket Knives

A complete pocket knife without the handle cover and various parts of pocket knives were found. The complete specimen, made of ferrous metal, is extremely corroded and, therefore, was not opened in order to observe the blade. The knife measures 8.5 cm in length and has one rounded end (Fig. 97). The remaining parts consist of two bolster linings, one of a yellow metal and one of ferrous metal, and two bone handle fragments. No identifying or maker's marks are observable on any of the artifacts.

### 5.1.20 Distribution of Pocket Knives

The complete pocket knife and the remaining specimens, except for one bone handle fragment, were recovered in the western extension of the north palisade (Square 40R03). The bone fragment was found in the factor's house.

### 5.1.21 Spigot Handle

The spigot handle found at Fort Pelly 1 is made of yellow metal. The top portion is T-shaped, 4 cm long, and extends to the main stem which is circular, 1.5 cm in diameter (Fig. 97). This part which would have been attached to the barrel is broken. The spigot handle measures 6 cm in length. The spigot handle was recovered from the kitchen.

## 5.1.22 Stable and Barn Hardware

### Bit Pieces

The bit pieces found at Fort Pelly 1 are made of ferrous metal and resemble the snaffle bit, illustrated in Noel-Hume (1970). These consist of circular cheek ring pieces with a jointed curb. The bit pieces recovered consist of: two circular cheek rings, 5 cm in diameter, with a jointed mouthed curb, 10 cm long (Fig. 97), and three circular cheek rings, 3.5 cm and 4 cm in diameter.

### Harness Bells

Two complete harness bells and four fragments, all made of a yellow metal were recovered. The two complete specimens are similar, and consist of a circular body flaring outward towards the middle with a flat rectangular loop on top for attachment (Fig. 97). Decoration consists of circular holes on the top portion with incised designs on the bottom.

### Leather Strap Fragment

One small leather harness strap, 2 cm wide, with a loop was recovered.

### Strap Hooks

One complete and one partial harness strap hook made of ferrous metal were found. The complete hook measures 5 cm in length and consists of an oval eye and a hook with a T-bar at the end (Fig. 97). The second hook is almost complete except for the upward curve of the hook. The oval eye is larger and the overall length of the hook is 6 cm.

## 5.1.23 Distribution of Stable and Barn Hardware

The stable and barn hardware was distributed throughout seven main features at the post with the largest number of items (3) occurring in the factor's house and the warehouse. In the factor's house, these included two circular cheek rings, one with a jointed curb and a fragment of a harness bell. In the warehouse, the items included: one harness bell fragment; one circular cheek ring; and one complete harness strap hook. The remaining articles were distributed in the following features: the store had one complete harness bell; the later blacksmith shop had one complete harness bell and one circular cheek ring; the stable had one harness bell fragment and one partial harness strap hook; and the kitchen had one circular cheek ring with a jointed curb, and the leather strap fragment.

### 5.1.24 Stove Parts and Accessories

A total of 11 wood stove parts and accessories were recovered at Fort Pelly 1. The majority (8) consist of stove body fragments made of ferrous metal. One piece of graphite with moulded lines was found and is part of the inside stove liner. A stove ash pan and a stove lid lifter were also recovered. The ash pan is made of ferrous metal and is extremely corroded and covered with ash and badly crushed precluding observations of shape or size. The stove lid lifter is complete and measures 29.5 cm by 1.7 cm and is half-round in cross section. An eye for hanging is present at one end while the other is upturned for lifting the stove lid. In addition to the stove parts and accessories, a vent pipe top with part of the pipe present was found. The vent pipe top is 14 cm square, with a round opening of 7.5 cm through which the pipe passed. The vent was attached by a rivet in each of the corners.

### 5.1.25 Distribution of Stove Parts and Accessories

The wood stove parts and accessories were restricted to three buildings: the kitchen, the men's house and the North cellar as well as in the west palisade and the western extension of the north palisade. The remains in the palisades consisted of four stove body fragments and the fragment of graphite. The remaining parts were distributed as follows in the three buildings: the kitchen had one stove body fragment and the vent pipe top with the pipe remains; the men's house had three stove body fragments and the ash pan; and the North cellar had one stove lid lifter.

### 5.1.26 Strike-a-Lights (Fire-Steels)

A strike-a-light and 5 fragments which were used in association with a piece of flint to produce a spark were found at Fort Pelly 1. These could easily be fashioned by the blacksmith who would take a piece of ferrous metal, heat and flatten it, and bend it in an oval or other form. The complete strike-a-light is oval in shape, 7.5 cm by 3.5 cm, with a central opening and the ends turned outward (Fig. 97). The five fragments are from oval strike-a-lights, either similar or varying slightly in shape from the complete example.

### 5.1.27 Distribution of Strike-a-Lights

The complete strike-a-light was recovered from the north cellar of the warehouse. The five strike-a-light fragments were found in the store, the early blacksmith shop, the men's house, in an ash pit and in the western extension of the north palisade (Square 40R03).

### 5.1.28 Survey Equipment

Two balancing rods from surveying equipment were found. These consist of a thin rod, 3 mm in diameter and 20.5 cm long, made of a gray metal and forked at one end for a length of 2 cm (Fig. 98). Three eyes are present, one at the end and one on each of the two tines. Both of these balancing rods were found in the north cellar of the warehouse.

### 5.1.29 Tools

#### Augers

Basically, an auger consists of an iron shank with a T-shaped handle at one end and a boring device at the other (Salaman 1975:31). Three "bung borer" augers, two complete except for the handle and one partial one, were found at Fort Pelly 1. These have a body shaped like a half cylinder with a short spiral tip (Fig. 98). Bung borers were used to bore a tapered hole through the side of a cask. The two complete examples found are made of ferrous metal and measure 17 cm and 13 cm in length. Also two spiral shaft portions of an auger or drill were found. They have a diameter of 11 cm.

#### Bits

Three tapered bit tangs and one centre bit were found at Fort Pelly 1. Salaman (1975:75) notes that a characteristic of brace bits is the short, square tapered tang, which in the early 19th century had a small nick filed on one face of the tapered tang. This tang is 6.8 cm long and the two tangs without the nick are 7.5 cm and 8 cm long. The centre bit consists of a flat nose with an upturned point for the cutter and a downward point for the spur-cutter. Centre bits were quite common in the 19th century as they could be easily made by the local blacksmith (Salaman 1975:78).

#### Awls

Awls are sharp metal spikes which are used for making holes in wood, leather, and other soft materials. Awls penetrate by squeezing the material apart (Salaman 1975:44). Four styles of awls made of three different materials, ferrous metal, yellow metal and bone, were found at Fort Pelly 1. A total of 12 offset awls made of ferrous metal represent the most common type found. The complete awls range in length from 7 cm to 10 cm. Wood fragments and grommets made of a yellow metal are present on one end of a complete offset awl (Fig. 98). Two additional awls made of ferrous metal are double-pointed but differ from the above in that they are not offset (Fig. 98). They measure 16.2 cm and 9 cm in length. The two bone awls found are pointed at one end only and the complete specimen measures 8.3 cm in length (Fig. 98). The awl made of yellow metal differs significantly from the others. It consists

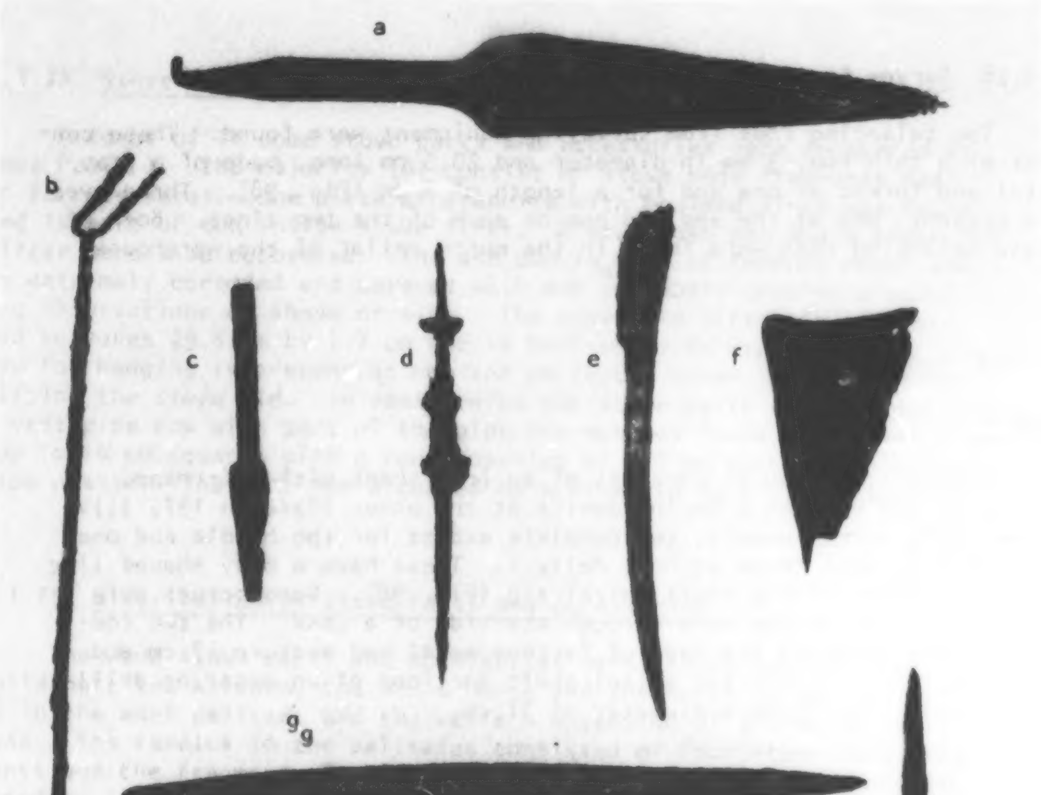
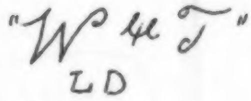
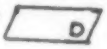


Figure 98. Bung borer, a; survey balancing rod, b; tapered bit tang, c; offset awl with grommets and wood fragments, d; bone awl, e; yellow metal awl with inscription, f; double pointed awl, g; firmer chisel, h; drawer lock chisel, i; gate type saw set, j.

of a flattened scrap of yellow metal with the inscription 

(Fig. 98) and a short threaded bit at one end. Its unusual shape and the material suggests local manufacture.

## Axes/Hatchets

Three complete axe heads and five fragments were found. The three complete axes which differ in shape (Fig. 99) are made of ferrous metal and are representative of the common wedge axe which was popular in the 1800s (Salaman 1975:47). The axes found were manufactured from a strap of ferrous metal folded over to form an eye, with a piece of metal inserted at the end to fashion the heel. This piece of metal is evident in one axe (Fig. 99c) where the heel has split. A stamp 

is partially visible on one axe.

## Chisels

A chisel basically is a tool with a steel blade, mostly rectangular in section, with the end ground to a sharp edge and usually fitted with a wooden handle (Salaman 1975:130). Chisels were sub-divided into a number of types according to the shape and thickness of the blade and the type of work for which it was normally used. Two main types of chisels, the firmer and the mortice (Salaman 1975), were found at Fort Pelly 1. The firmer chisel is an all-purpose tool with a flat blade with parallel sides, strong enough to be struck with a mallet. One complete firmer chisel (Fig. 98) which measures 10 cm by 3 cm by 5 mm and five fragments was found. The mortice chisel has a thick stock blade and heavy handle to take the blows of a mallot and is used for cutting mortices and similar work (Salaman 1975:134). Two complete mortice chisels, measuring 16.5 cm by 8 cm by 8 mm and 17 cm by 1 cm by 1 cm and four fragments were recovered.

In addition to the firmer and mortice type chisels, four drawer lock type chisels were also recovered. This is a special chisel which was used for "chopping out the recess to take the lock and bolt of drawer-locks" when there was not sufficient room to use an ordinary chisel (Salaman 1975:138). The types found at Fort Pelly 1 consist of a rectangular bar of metal which ranges in width and thickness from 8 mm to 2.2 cm and 3 mm to 7 mm, respectively. One end fits into a wooden handle, while the other end is turned outward at a right angle to the bar (Fig. 98). The length of the bar, without the outward tang, ranged from 7.5 cm to 13.3 cm.

## Claw

One ferrous metal double claw used for loosening and removing nails, spikes, etc. was found. It measures 8 cm by 2.5 cm. Two straps into which a wooden handle would be inserted and riveted extends from each side of the claw.

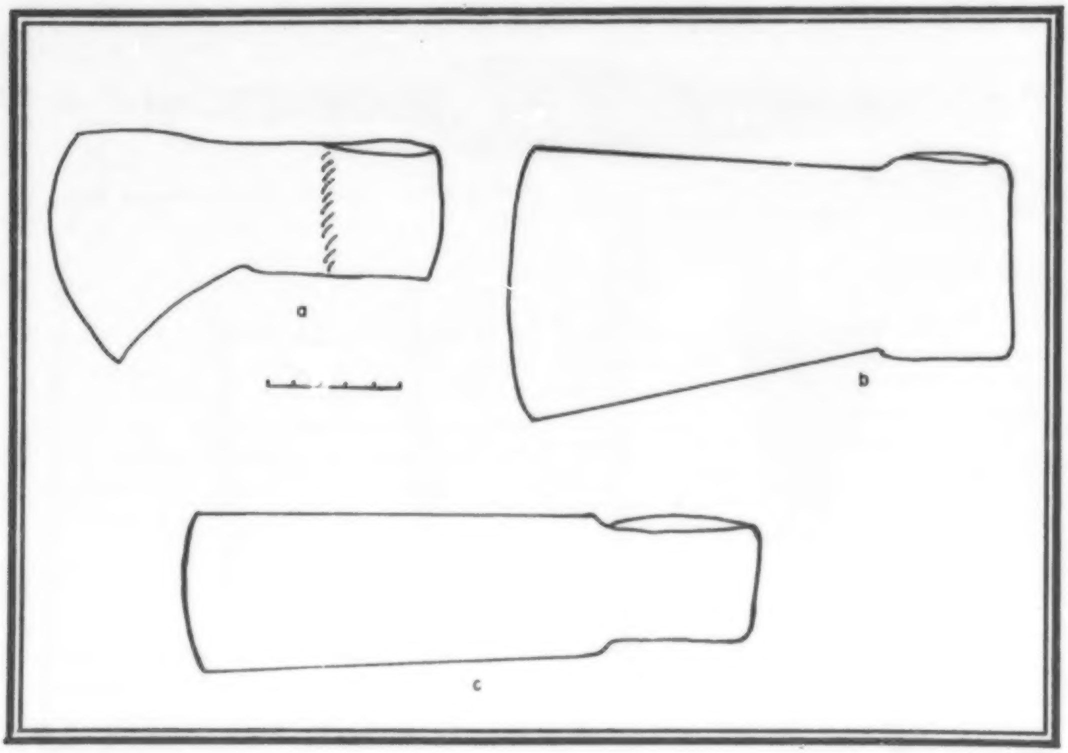


Figure 99. Axe Shapes.

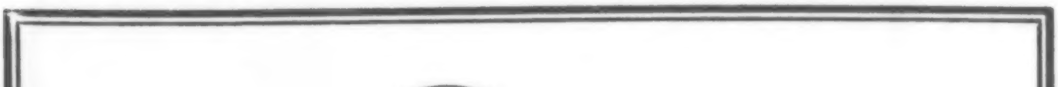

WARRANTED
BEST
F
E
JUKES COULSON & CO
SHEFIELD
Mark 1
MIDDLESEX
W
Obverse
BEST STEEL
Reverse
Mark 2

Figure 100. Marks found on chisel fragments.

## Files

Basically, a file consists of "a metal bar of hardened steel, having one or more of its surfaces covered with a series of raised cutting edges or teeth, designed to cut by abrading" (Salaman 1975:194). The typical cuts used were float or single cut, double cut, or rasp cut. The most common types of shapes employed included, half-round, round or rat tail, flat or ward, three-square or saw and fusiform or "cigar-shaped" (Salaman 1975:195). A total of 67 files and fragments were recovered from Fort Pelly 1. These are presented in Table 35 by type, cut, and identifiable part. The ranges of the width and thickness for the various types are: half-round, 1 cm to 2.4 cm by 0.5 cm to 0.75 cm; flat, 1.3 cm to 3.5 cm by 0.4 cm to 0.79 cm; round, 0.7 cm to 0.76 cm (diameter); and three-square, 1.1 cm to 1.3 cm. Stamped marks are present on two flat chisels with float cuts and on one tang fragment. The two marks on the float chisel are illustrated in Fig. 100. The mark on the tang is "_____ARKIN".

## Gouge

Gouges are similar to chisels but the blade is hollow in cross section for cutting curved surfaces (Salaman 1975:211). They vary in width from 0.625 cm to 6 cm. One gouge blade fragment was found at Fort Pelly 1. It is 0.35 cm wide and the blade has the grinding level on the inside known as "in-cannel" (Salaman 1975:211). In general, the in-cannel gouge is used "when it is necessary to make a cut in a straight line, e.g. for scribing a moulding, or when boxing a wheel hub" (Salaman 1975: 211).

## Hammer

One blacksmith hammer head was found. It is cone-shaped with a rounded end and measures 7 cm in length and is 2.4 cm wide at its widest point.

## Punches

A punch consists of "a short steel rod, round or square in section, tapered at one end" and used for driving the nail below the surface of the wood (Salaman 1975:384). A total of eight punches, two complete and six fragments, were found at Fort Pelly 1. These are either square (7) or rectangular (1) in cross section. The complete punches measure 11 cm by 1.6 cm by 1.2 cm and 8 cm by 1 cm$^2$. The punch fragments are all square in cross section and their diameters range from 0.4 cm to 0.75 cm.

## Saw Blades

A total of seven saw blade fragments were recovered from Fort Pelly 1. The fragments are too small to provide any estimate of the size of the saws, but observations of the cutting teeth are possible.

TABLE 35

Files: Quantitative and Morphological Data

| Type | Cut | C | B | Tang Only | B & T | Number | Comments |
|---|---|---|---|---|---|---|---|
| Half-round | Float | x | | | | 2 | 23 x 1.1 x .6 (cm)<br>20 x 1 x .66 (cm) |
| | | | x | | | 9 | |
| | | | | | x | 5 | |
| | Unidentifiable | x | | | | 1 | 18.5 x 1 x .69 (cm) |
| | | | x | | | 5 | |
| | | | | | x | 2 | extremely burnt |
| Flat | Float | x | | | | 1 | 45 x 2.5 x .69 (cm) |
| | | | x | | | 12 | |
| | | | | | x | 8 | |
| | Double-cut | | x | | | 2 | |
| | Unidentifiable | | x | | | 6 | |
| | | | | | x | 2 | |
| Round | Float | | | | x | 3 | |
| Three-Square | Float | x | | | | 1 | 16 x 1.1 x 1.1 (cm) |
| | | | x | | | 1 | |
| Unknown | Unknown | | | x | | 3 | |
| Unidentifiable | Unidentifiable | | x | | | 4 | |

Six of the fragments belong to hand saws with five to six rip saw teeth points per inch. The final fragment belongs to a cross-cut saw with five rectangular teeth per inch.

### Saw Setters

Saw setters were used "to set the saw teeth, i.e., to bend them sideways to left and right alternatively, so that they cut a groove a little wider than the blade itself and so reduce friction" (Salaman 1975:437). One complete heavy gate-type saw set and one fragment for a pit or circular saw were found at Fort Pelly 1. The gate-type saw set (Fig. 98) is the most common type made and the ones found consist of a steel bar with a tang and narrow "gates" which are narrow slots corresponding to the thickness of the saw blades. The examples from Fort Pelly 1 have a small hole at the bottom of each gate, probably to ease the removal of metal during manufacture (Salaman 1975:437).

### Wedges

A total of 12 wedges, 6 complete and 6 fragmentary, were found. These taper on two faces and range in length from 5.5 cm to 9.5 cm and in width from 1.1 cm to 1.8 cm.

### Whetstones

Four fragments of whetstones, used for sharpening tools and various implements were found. These are too fragmentary to allow any observations of size or shape.

## 5.1.30 Distribution of Tools

The largest number and variety of tools were found in three main structures, the early blacksmith shop, the warehouse, and the men's house. These were scattered as follows in the various features: the early blacksmith shop had one complete and one partial bung borer (auger), one spiral drill shaft, three awls, two offset and one bi-pointed, two axes (a and b), and one fragment, one firmer chisel, 13 files of various types, one hammer head, one hand saw blade fragment, one saw setter fragment, three wedges, and two punches. The warehouse had one bung borer, two offset awls, one axe (c) and two fragments, three chisels, one claw, one gouge, 15 files, including the tang with "_____ARKIN", three hand saw blade fragments, one wedge, three whetstone fragments, and three punches. The men's house had one spiral drill shaft, one firmer chisel, 19 files, including the fragment with "Jukes Coulson", and one wedge. A small number of tools were also found in the stable, the kitchen, the store, and the North cellar. Items in these various structures included: (1) one awl of yellow metal, one chisel and one file in the stable; (2) four offset awls, one axe fragment, four files, one complete saw set and one punch in the store; and (4) one wedge in the North cellar. The remainder of the tools were scattered throughout the later east and west palisades and the southwest palisade corner and other areas of the post.

### 5.1.31 Transportating Hardware

#### Bale Seals

Thirteen bale seals were recovered at Fort Pelly 1. A bale seal is a small, circular cast-lead object used to seal and identify the contents of packaged goods (Stone 1974:281). The bale seals found consist of two lead circular discs connected by a narrow band of lead. These are illustrated and described in Fig. 101. The name of the firms are present (to some extent) on the front of the bale seals, with numbers and designs incised on the back. Three different packers are represented by the bale seals: (1)..........& HOWELL LONDON: (2)..........LSAGER LONDON: (3) WILBRAHAM WOOD.

### 5.1.32 Distribution of Bale Seals

The bale seals were found in four main structures; the store, the warehouse, the factor's house, and the kitchen. One bale seal was found in the early south palisade and one rim fragment and back fragment were recovered in the later west palisade. The largest number of bale seals (4) which included the "WILBRAHAM" was present in the store, while two bale seals and one bale seal ("HOWELL") were found in the warehouse and factor's house respectively. Two back fragments and one front fragment were found in the kitchen.

### 5.1.33 Barrel Strapping

Barrel hooping (straps) which were fastened to casks and barrels were found in large numbers at Fort Pelly 1. A total of 53 were recovered, with the majority (46) consisting of fragments, made either of ferrous metal or yellow metal. The ferrous metal straps are the more numerous and range in width and thickness from 1.7 cm to 4 cm and 1 mm to 3 mm respectively. Rivets and circular holes are present on the various pieces. Six complete ferrous metal hoops were found. These vary in diameter from 13.5 cm to 50 cm, with the ends overlapping and fastened together by either one or two rivets. The straps of these range in width and thickness from 1.85 cm to 3.5 cm and 1.5 mm to 2 mm respectively. One fragment and one complete barrel hoop of yellow metal were found. The fragment has a width of 3 cm and is 3 mm thick and represents the overlapped end with one rivet present. The complete yellow metal hoop had a diameter of 32 cm with the strap being 2.5 cm

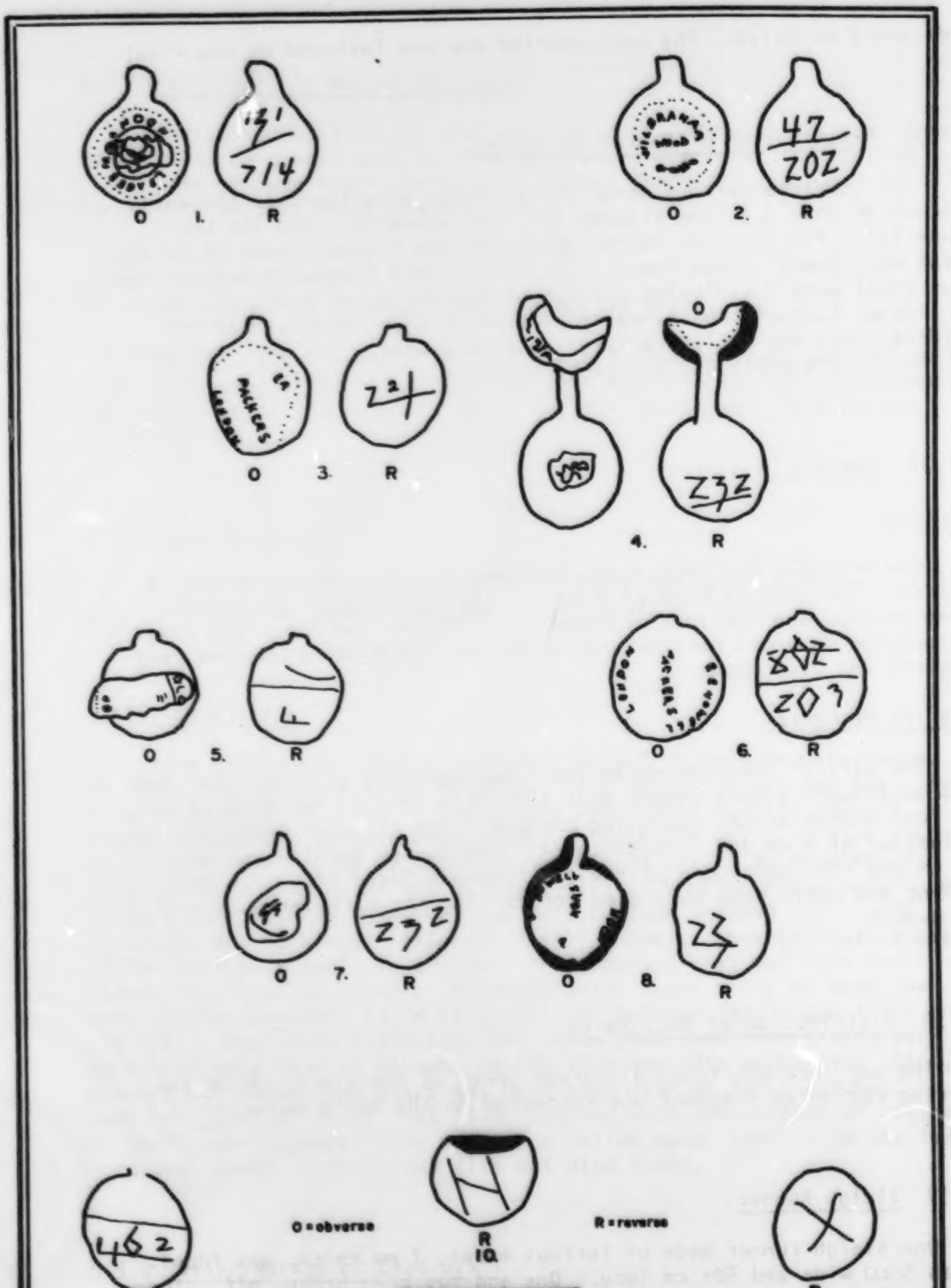

O
1.
R
121
714
O
2.
R
47
202
O
3.
R
PACKERS
LONDON
Z2
O
4.
R
Z3Z
O
5.
R
L
LONDON
PACKERS
O
6.
R
8DZ
203
O
7.
R
Z3Z
O
8.
R
ZZ
R
9.
462
O=obverse
R
10.
R=reverse
R
11.
0 1 2 3 4 5cm

Figure 101. Bale Seals.

wide and 2 mm thick. The ends overlap and are fastened by one rivet.

### 5.1.34 Distribution of Barrel Strapping

The complete ferrous metal barrel hoops were found in the early blacksmith shop (2), the kitchen (1), the store (2), and the men's house (1). The complete barrel hoop plus the fragment made of yellow metal were found in the store. The barrel hoop fragments made of ferrous metal were distributed throughout the following features: store, warehouse, factor's house, early blacksmith shop, stable, and west palisade, and the early and later east palisades. The majority were present in the store and the factor's house.

### 5.1.35 Boat Parts

#### Oar Lock

One U-shaped oar lock with a notched tang for anchoring was recovered. The lock is made of a bar of ferrous metal, circular in cross section and the lock measures 11 cm across the top. The tang is rectangular in cross section and 17 cm long. One other notched tang fragment was also found.

#### Steering Mechanism

The partial steering mechanism found consists of a circular ferrous metal part with a square hole centrally located for a metal rod and four broken spokes radiating outward. The circular mechanism has a diameter of 9 cm and is 4 cm thick. The square opening measures 2.7 cm and the square end of the rod fragment found fits into the opening and would have been used for turning the circular part with the spokes.

### 5.1.36 Distribution of Boat Parts

The oar lock was found discarded south of the store, while the steering mechanism fragment was recovered in the men's house.

### 5.1.37 Sleigh Runner

One sleigh runner made of ferrous metal, 7 mm thick, was found. It was 5 cm wide and 80+ cm long. One end has been broken off. Three square holes spaced 30 cm apart are present. The sleigh runner was found in the store.

### 5.2 Prehistoric or Native Artifacts

Prehistoric material at the post is scant. Remains include: two flakes, one of quartz and one of Swan River chert; one side-notched point base of Swan River chert; and a basal fragment of a point or biface knife of Swan River chert.

#### 5.2.1 Distribution of Prehistoric or Native Artifacts

The two flakes were found in the early east palisade and the early blacksmith shop. The point base was also found in the early blacksmith shop area, while the point or knife basal fragment was found in the west palisade.

### 5.3 Miscellaneous

Articles in this group consist of items for which a definite function could not be determined, and scrap metal.

#### 5.3.1 Lead Discs

Nine lead discs ranging in size from 2.5 cm to 3 cm were found. Of these, two are octagonal in shape, four are circular, two are circular with holes drilled in the centre and one is roughly oval in shape and appears to have been broken. These are all of a size that would have been formed by pounding out a lead ball. No markings or attachments are found on any of these discs. Similar discs were found at Fort George (Kidd 1970:147) and Fort Carlton (Klimko n.d.) with scratches and markings. Kidd (1970:147) suggests that although these differ from bale seals in a number of respects, they may have functioned in a similar manner. Alternatively, these could be used for game tokens, counters (Kidd 1970:147), or buttons (Noel-Hume 1970: 173-174). Noel-Hume (1970:173-174) notes that lead tokens with perforations were used as buttons in the 17th and 18th centuries. Also, a number of these lead discs may have been used as flint patches. Hamilton (1976:5) notes that flint patches were made either of leather or lead. An octagonal disc made of a yellow metal similar to the lead octagonal discs in shape and size was also found.

#### 5.3.2 Distribution of Lead Discs

Eight of these discs were found scattered throughout the post in the various features: the factor's house had two octagonal and one oval lead disc, and one octagonal yellow metal disc; the men's house had one circular lead disc with a hole through the centre; the warehouse had one lead disc; and the early east palisade had one lead disc. The remaining discs were scattered throughout the site in no one particular feature.

### 5.3.3 Pegs and Knobs

Three peg-like items with a rounded knob were found. They are made of ferrous metal and measure 4.5 cm to 5 cm in length. One knob-like item found is made of yellow metal. It has a rounded top and flares outwards toward the stem. It is 2.5 cm long and may have belonged on a gun or decorative furniture, etc. The peg-like items were all found in the kitchen, while the ornate knob-like item was found in the warehouse.

### 5.3.4 Chain Links

Two pieces of chain link were found and both are made of a yellow metal. The links are 1.5 cm long with ends looped and intercepted with the next link. These were found in the warehouse foundation and the north palisade.

### 5.3.5 Rings or Collars

Two rings made from ferrous metal straps, 2 mm thick and 2.5 cm and 4 cm wide were found. The rings have a diameter of 5.5 cm and 5 cm respectively and the edges on one ring are turned outward. These could represent an axle collar or otherparts from a cart, etc. These were found in the early south palisade and the early blacksmith shop.

### 5.3.6 Blade

One "propeller" or "fan-type" blade was recovered. It is made of ferrous metal and is 14.5 cm long. The blade ends are "leaf-shaped" and a circular attachment hole is centrally located. This item was found in the men's house.

### 5.3.7 Hooks

A total of six hooks made of ferrous metal were found. Two shapes and a variety of sizes ranging from 4 cm to 11.5 cm were found. Four of the hooks consist either of a metal strap or wire with one end upturned and an eye forged or wrapped at the other end. The remaining two consist of a strap of metal with one or two fastening holes and a circular rod with a barbed end for the hook. The hooks were distributed throughout the post as follows: North cellar (2); early blacksmith shop (1); kitchen (1); men's house (1); and warehouse (1).

### 5.3.8 Yellow Metal Fragment with Mark

One thin (2 mm thick) yellow metal fragment from a circular item has the words "PATENTEES.LONDON" around the circumference with a royal coat of arms embossed beneath. It was found in the factor's house.

### 5.3.9 Birch Bark Basket and Fragments

One birch bark basket, extremely crushed, was found. It is constructed of three rectangular pieces with triangular ends which are folded under to form the bottom. Oval holes are present where the stitching had existed. Roughly approximated, the height would have been around 27 cm. It is impossible to determine a rough diameter. Two large flattened rolls of birch bark were also found. They are 14 cm and 47 cm wide. Due to their fragile condition, these were not unrolled to obtain their length. However, an estimated length of 40 cm and 100 cm respectively was determined based on the number of layers and the length of the flattened roll. Thirty-nine various sizes pieces of birch bark were also found.

The birch bark basket was recovered from the hearth area of the warehouse, while one roll was found in the north cellar of the warehouse. The other roll was found in the early blacksmith shop. The birch bark fragments were found scattered throughout the early and late palisades and the store, warehouse, and factor's house.

### 5.3.10 Bone Rings

A total of sixty-five small bone rings were found. The width of the bone ranges from 1 mm to 9 mm and the diameter of the rings ranges from 6 mm to 14 mm, with the majority being 6 mm. These bone rings are quite fragile and their use could not be determined. The bone rings were distributed as follows: stable (6); kitchen (1); warehouse (14); and store (44).

### 5.3.11 Miscellaneous Bars and Rods

Fifty-four bars and rods in various sizes, shapes and material were recovered. These range in length from 2 cm to 20 cm and are either square, rectangular or circular in cross section. The circular bars have an average diameter of 6 mm while the square rods have an average measurement of 8 mm. The average measurement for the rectangular bars is 15 mm by 10 mm. All are made of ferrous metal except for two of a yellow metal and three of a gray metal. The largest numbers of bars and rods were found in the warehouse (9), factor's house (10) and the early blacksmith shop (8). The remaining bars were found in the store (4), and kitchen (4), and scattered throughout the early and later palisades.

### 5.3.12 Wire Fragments

Forty-one pieces of wire made of either ferrous metal (16) or a yellow metal (25) were found in various lengths and diameters. The ferrous wire pieces range in length from 4 cm to 30 cm and in diameter from 1.5 mm to 2.7 mm. The wire fragments made of a yellow metal range in length from 2 cm to 90 cm and in diameter from 0.7 mm to 1.9 mm. A length of wire, 90 cm long, had been wrapped into a bundle. The largest amounts of wire were found in the store, the warehouse and the west palisade. The rest were scattered throughout the early and later palisades and the large bundle of wire was found in the kitchen.

### 5.3.13 Scrap Metal

Scrap metal consisting of ferrous, yellow metal and gray metal, found at Fort Pelly was counted and weighed. The total number of fragments and the weight for each metal are: ferrous, total 286, weight 12 kg; yellow metal, total 182, weight 1.865 kg; gray metal, total 64, weight 0.7227 kg. The majority of various metal scraps were found scattered throughout the palisades (202), in the warehouse (117), where they were concentrated in the north cellar, and in the early blacksmith shop and stable area (62). The remainder were distributed between the factor's house, the kitchen, and the store. No one type of metal appeared in any significant quantity in any one feature.

### 5.3.14 Lead Foil Fragments

Lead foil fragments, used to line the containers for tea, to keep out moisture were recovered in large amounts at Fort Pelly 1. A total of 158 fragments weighing 0.2072 kg were found. Large amounts of lead foil were found in the warehouse (43 pieces or 370.5 gm), especially the north cellar, men's house (18 pieces or 661.2 gm) and the store (56 pieces or 512 gm). The rest were distributed in the kitchen, the factor's house, the stable and throughout the palisades.

## ADDENDUM

## PASTLOG

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